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ABSTRACT

This digest explores the question, What types of activities and experiences should a good learning environment offer to the young child to help him grow normally and happily? Part 1 focuses on basic considerations in the development of early childhood care and education (ECCE) curricula. Four chapters concern: (1) the learning needs of the young child; (2) the centrality of the child's spontaneous activity; (3) play and playthings; and (4) early instruction. Part 2 deals with methodological considerations relevant to early childhood interventions. Conceptual aspects of learning, the preschool teacher, parent-school cooperation in a changing society, and teaching and learning methods appropriate to ECCE are discussed. The third part concerns facilities, equipment, and materials. Topics include buildings, books and other printed materials, audiovisual materials, furniture, and children's health and development records and related materials. Part 4 presents ideas to be considered in the process of changing the preschool curriculum, particularly in the move from a curriculum based on teaching to one based on learning. Also considered are the teacher-researcher relationship, a 6-step curriculum model, and criteria for designing an open learning environment. (RH)

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The following are the titles in the series of six Digests on Early Childhood Care and Education

A. By Veda Prakasha

Digest No. I	*Our Future is in Our Children: The Case for Early Childhood Care and Education*
Digest No. II	*Battling Costs for Q... Quantity: Emerging ... Early Childhood ... Education*
Digest No. III	*Zero through Six: ... Growing; What we know ... Very Young Child*
Digest No. IV	*Towards an Open Learning Environment for the Young Child: Some Principles, Practices and Issues in Curriculum Planning*

B. By Jayananda Ratnaike

Digest No. V	*Preparing to Help the Young Child Learn and Grow: Training ECCE Personnel*

C. By David J. Vickery

Digest No. VI	*A Facilities Design Guide*

NOTES, COMMENTS... (CHILD, FAMILY, COMMUNITY)

Digest No. IV

Towards an Open Learning Environment for the Young Child: Some Principles, Practices and Issues in Curriculum Planning

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UNESCO/UNICEF
CO-OPERATIVE PROGRAMME
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ED/84/WS/40

Dear Colleague,

TOWARDS AN OPEN LEARNING ENVIRONMENT FOR THE YOUNG CHILD: SOME PRINCIPLES, PRACTICES AND ISSUES IN CURRICULUM PLANNING is the fourth of the "NOTES, COMMENTS..." (CHILD, FAMILY, COMMUNITY) Digests, and is aimed at exploring the more important aspects of the pre-school curriculum. The central question underlying this exposition is: What types of activities and experiences should a good learning environment offer to the young child to help him grow normally and happily? While it neither purports to be a manual for the early chiidhood educator nor yet a book of readings for the students of ECCE, its limited purposes is to make a systematic presentation of some of the major aspects and issues of pre-school education using for its basis the following documents:

- *Notes, Comments... (Child, Family, Community) New Series, Sub-Classification: Pre-School Education Nos. 1-39;*
- *Notes, Comments... New Series No. 31, 38, 50, 97, 115, 133;*
- *Early Childhood Education. Bernard Spodek, Prentice-Hall, 1973;*
- *Early Childhood Education. The Seventy-first Yearbook of the National Society for the Study of Education, 1972;*
- *How to Run a Balwadi, Anutai Vagh, December 1977;*
- *Training Teacher Trainers and Para-Professional Teachers, Dr. D.F.B. Grant. Bernard van Leer Foundation,1982;*
- *Curriculum in Early Childhood Education. Report of a Seminar held from 15-25 November 1972 in Jerusalem, Bernard van Leer Foundation;*

- *Is It Tomorrow Yet? Handbook for Educators of the Very Young by Elinor Schulman KOLUMBUS. Mount Carmel Training Centre for Community Services, Haifa, Israel, 1979;*

- *The Active Child - The Learning Child - A Handbook for Kindergartens, 1980. Study Centre for Children's Activities, Tivon, Israel (Mimeo);*

- *Infant and Nursery Curriculum. Prepared by the Committee on Nursery and Infant Education for the National Curriculum Development Council - Barbados;*

- *Planning the School Curriculum by Arieh Lewy, IIEP, Unesco, 1977;*

- *World Survey of Pre-School Education by Gaston Mialaret, Educational Studies and Documents, No.19, Unesco, Paris, 1976;*

- *The Child and Play - Theoretical Approaches and Teaching Applications. Educational Studies and Documents, No. 34, Unesco, 1980;*

- *The Child and His Development from Bith to Six years, Unesco, Paris, 1976;*

- *Study Group Meeting on New Forms of Pre-School Education - Final Report (mimeo) (New Delhi, 25-30 April 1983) Unesco and National Council of Educational Research and Training.*

Needless to add the views and opinions expressed in the Digest are those of the authors of the original documents, or of the author of the Digest, and do not necessarily reflect those of Unesco.

The occasion to digest the issues on pre-school education has arisen from the growing demand of readers for these. A most gratifying feature of the Series has

been that, although originally developed to help programming officers in the field, whether national, or those representing UNICEF or Unesco, to design and implement project activities in education relevant to UNICEF's interests and concerns, it is being currently used by many others for different purposes. It is hoped that the expanding readership of the documentation prepared by the Unit for Co-operation with UNICEF and WFP will find the Digest as relevant to their needs and of as much practical use as the original issues of the Series.

Unesco is thankful to the publishers/authors who kindly gave their permission to be quoted extensively in this Digest. While references are given to all quotations from published works in the form of footnotes, extracts from "Notes, Comments..." (Child, Family, Community) New Series are identified with numbers relating to references in Appendix II.

Once again, the Unit will be thankful for your comments and suggestions and, above all, your contribution to the "Notes, Comments..." (Child, Family, Community) New Series.

Ananda W.P. Guruge
Chief
Unit for Co-operation with
UNICEF and WFP
Education Sector

28 December 1983

N.B. We are most grateful to both the Unesco Phototheque and the Bernard van Leer Foundation for having furnished the photographs featured in the Digest.

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INTRODUCTION

A major contemporary development in education is the widespread reawakening of interest in the very young child. For centuries, great educators such as Comenius, Pestalozzi, Froebel, Basedow and Montessori intuitively sensed the importance of children's experiences before the age of six. Also, during the past 40 years, nursery and pre-school specialists have made a strong case for providing the young child with an environment designed to stimulate his physical, intellectual and emotional development. *The main idea behind this concept of environmental mediation is that during the child's early life wholesome forms of intervention in his milieu can help him become more effective in his transactions and interactions with others.* While a sentimental interest in improving the environment of children has existed for centuries, the concept of a deliberate, planned intervention is, for practical purposes, a phenomenon of recent times. (1)

Psychologically speaking there is increasing consensus among students of human behaviour that if a child is to achieve the all round development of his personality, his need for adventure and new experiences must be satisfied from the very beginning. It is only if this need is met throughout childhood and adolescence that a child's intelligence will develop satisfactorily. Just as the body requires food for physical development, new experiences are needed for the development of the mind. Numerous developmental anomalies and behavioural problems among children from under privileged families are normally attributed to heredity, whereas they are, in fact, the result of unfavourable living conditions before or shortly after birth. If such children could receive early enough the care, affection and stimulation

in their families, the chances are that they would begin to grow like normal children in every important respect and be able soon to shed any imprints that the mediocrity and retardation of their initial living conditions might have inflicted on them.

Interest in developing a formal institutional or informal home-based Early Childhood-Care-and-Education (ECCE) programme can hardly begin better than by asking the question:

WHAT ARE THE BASIC LEARNING AND GROWTH NEEDS OF THE YOUNG CHILD THAT A STIMULATING ENVIRONMENT MUST AIM TO FULFIL?

Conversely, what are the characteristics of an environment that will make it both challenging and satisfying to the child?

To elaborate the enquiry further,

- What type of activities and experiences should a good learning environment offer so that a child can grow normally and happily?

- What are some of the more effective methods and techniques of pre-school intervention?

- What kind of material facilities and other learning equipment does a good ECCE programme need to realize its individual and social objectives?

- And what are the attributes of a good effective pre-school mediator or teacher?

- What we are really asking, to use a popular educational jargon, is <u>What is a good ECCE curriculum</u>?

The present Digest is addressed to these and related curricular questions. It examines, in particular, possibilities of designing learning environments in developing countries and offers a few general comments on the planning and evaluation of pre-school curricula. The Digest consists of the following four parts, comprising 19 chapters:

PART ONE: Basic Considerations in Developing ECCE Curricula.

PART TWO: Methodological Considerations Relevant to ECCE Interventions.

PART THREE: Needed facilities, Equipment and Materials.

PART FOUR: Changing the Pre-School Curriculum; Some Considerations.

Each part consists of four to six chapters.

PART ONE: BASIC CONSIDERATIONS IN DEVELOPING ECCE CURRICULA

I. THE LEARNING NEEDS OF THE YOUNG CHILD

A. TAXONOMY OF EDUCATIONAL OBJECTIVES

A reference to the physical or physiological needs (food, drink, rest, sleep etc.) and safety needs of the child was made in Digest III (p.51). A detailed elaboration of his psychological or developmental needs (love and security, need for new experiences, praise and recognition, and responsibility)was also attempted therein (pp. 55-68). Although terms like physical or motor development, cognitive or intellectual development, emotional maturation, social and moral development etc. were frequently used there, no specific hypothesisation in favour of a slightly different way of classifying a child's needs, namely, psycho-motor (or sensori-motor), cognitive (or intellectual) and affective (socio-emotional), was suggested. As the preoccupation of the present Digest is with the curricular aspects of ECCE, such a classification following closely as it does the well-known taxonomy of educational objectives first outlined by Bloom* , has advantage and offers one useful way of evaluating the relevance and adequacy of a pre-school curriculum.

It is suggested that those of the child's learning needs that concern activities and experiences aimed at promoting sensory and motor functions such as use of big and small muscles, neuro-muscular co-ordination, perceptual skills such as auditory and visual discrimination etc. may be called PSYCHO-MOTOR LEARNING NEEDS.

COGNITIVE LEARNING NEEDS *could be taken to refer essentially to needs for activities and experiences*

* Bloom, B.S. et al: *Taxonomy of Educational Objectives: The Cognitive Domain*, New York, David MacKay, 1956.

asking and answering questions, listening and carrying out simple instructions, delivering messages, reading with comprehension, manipulation of numbers, making comparisons and drawing valid conclusions, concept formation, problem solving and so on.

AFFECTIVE LEARNING NEEDS *are those that concern the development of attitudes, interests and values and refer to needs for acquiring abilities such as ability to respect the feelings and rights of other children, ability to listen to adults, co-operate with them as a source of friendship, guidance and information, ability to control one's own behaviour rather than being controlled by others, being busy doing things with initiative and enthusiasm, to think divergently, and readiness to explore other possible solutions to a problem etc.*

Just as cognition, conation (corresponding to sensori-motor and volitional aspects of behaviour) and affection represent different aspects of human consciousness, and in reality are always found together, activities and experiences responding to one group of learning needs, psycho-motor, cognitive or affective, will also as a rule have effects relevant to the satisfaction or otherwise of the other categories. Of course, some activities may be primarily psycho-motor, just as others may be cognitive or socio-emotional.

In other words, the distinction between the three groups of learning needs should be regarded as one made only for reasons of practical pedagogic convenience; in the main, the categories do not imply any watertight compartmentation of the concerned bodily and mental functions.

B. BASIC LEARNING NEEDS OF THE YOUNG CHILD

What are the basic learning needs of the young child, particularly the disadvantaged child, to which the early intervention programmes of a nation must respond? A study group meeting in New Delhi recently to consider new forms of pre-school education that are emerging in the Asian countries and to examine their relevance to the socio-cultural conditions in the region, attempted to identify and explain them as follows:

(a) PSYCHO-MOTOR LEARNING NEEDS

(i) Health and Nutrition Related Needs

In view of the high rates of illness, mortality and morbidity, and of the high incidence of malnutrition in children in poverty groups in developing countries, provision for basic health and nutrition needs of these children should be the responsibility of any effective ECCE intervention programme. Indeed such programmes would need to be considered in the context of both care and education of the young child in an integrated manner.

These needs signal actions such as the following (which would also include corresponding and appropriate educational inputs in all cases):

- *Regular health check-ups*
- *Immunization*
- *Personal hygiene and cleanliness*
- *Supplementary nutrition*

(ii) Needs Related to Physical Development

Certain disadvantaged environments, such as urban slums, are characterized by the lack of adequate space and consequent restriction of mobility and activity for children. In others, although the space may be available, effective utilization of the space for physical development is lacking.

Keeping this situation in view, the following needs of children in poverty groups should be catered to:

- *need for the development of gross and fine motor coordination*
- *need for adequate space to facilitate freedom of movement (effective utilization of the space must be ensured.*

However, in intervention activities for physical development, a prior analysis of the psycho-motor development in the home learning environment would need to be made so that physical development aspects beyond those that are established and reinforced in the home learning environment, may be intervened for in the programmes for the young child.

In particular, attention may be paid to body image and the conscious and verbalized awareness of the body and its capabilities in physical development (which is an important step in the development of self-worth).

(b) COGNITIVE NEEDS (INTELLECTUAL)

Research studies indicate that the children in poverty groups are characteristically deficient in certain aspects of intellectual development which have a bearing on school learning. It may be attributed to the home atmosphere of these children which is not very conducive to verbalization -a necessary competence for school learning. In most of the developing countries, a majority of the parents in poverty groups are illiterate and the homes are generally devoid of any learning materials such as books, pictures, paper and pencil. Often the parents and other adults in the homes have neither the energy nor the time to interact with young children.

This kind of home environment gives rise to prominent intellectual needs which must be catered to by an effective intervention in the early years of life. The needs can be broadly categorised for the purposes of designing intervention activities, as those related to (a) language development, and (b) cognitive development.

(c) AFFECTIVE NEEDS

(i) Needs related to Emotional Development

Children at the early childhood stage are undergoing remarkable transformations in their body and mind, and doing so in the context of changing social demands, particularly in the micro-society of the child's immediate environment. All of these have implications for a variety of needs and competencies related to emotonial development. The complex sociological demands include training for the very significant growth of independence.

By 6 or 7 years, the child is expected to do routine home tasks and undertake corresponding responsibilities. The child is inculcated with respect for age and authority, with the need for warmth, obligation, and gratitude towards human, and indeed non-human benefactors. The child is initiated into the ability to recognize subtle cues which reveal unspoken feelings of others, as a result of close and intimate social interaction. The child is also initiated into coping with angry feelings without striking out, and be teased and tease, without losing self-control. The child learns to receive help with gratitude, and pool personal well-being with the individual well-being of the members of the extended family. The child quickly develops the ability to ignore activities of others, which, though visible, are not considered the child's "business".

Aside from such highly complex demands on the emotional development of the child, there is the defined sex differnetiation which rapidly gathers momentum and has its emotional counterparts for boys as well as for girls, each in different ways. Simultaneously, the child fits into a rich and complex network of social relationships that gradually widen out into the rest of the community.

Recognizing the shortfalls in knowledge regarding this area of high sensitivity for child development, and keeping in mind the reality of variations, particularly among poverty groups, the following may be considered as examples of the emotional needs and competencies of children:

- *love, affection, belongingness, trust, security;*

- *hope and aspiration;*

- *need for direction and guidance and willingness to accept guidance;*

- *need to be respected as a person, need for appreciation and recognition;*

- *autonomy, self-confidence, initiative, exploration, adventure, curiosity, creativity;*

- *self expression of positive and negative emotions, sensitivity;*

- *cultural and social identity;*

- *capacity to identify with positive stimulation and to deidentify with negative stimulation;*

- *capacity to accommodate to conflicting situations, need to raise frustration tolerance and to chanelize it in a positive direction.*

(ii) Affective Needs related to Social Development

In the domain of social development, the needs are more tilted towards those of extrinsic rather than of intrinsic origin. As the adult models for the accepted social skills may not be available to children in poverty groups in their home environments, pre-school programmes have special significance in this respect. However what social skills have to be compensated for in an intervention programme, have first to be determined, through a careful analysis of the behaviour pattern in the social environment of the child.

There exists a close interrelationship between the needs and competencies in the domain of emotions and those in the domain of social behaviour. Nevertheless the following may be noted as requiring particular attention and investigation:

- *acceptance of one's errors, defeat and failure;*

- *group membership, control of emotions, need for conformity and compliance, and the capacity to discriminate between what to conform to and what not to conform to, striking a balance between co-operation and competetion;*

- *leadership, sincerity, sense of duty and responsibility, learning to abide by rules and play the game;*

- *social sensitivity, social responsiveness, capacity to express sympathy, social justice (which would include respect for needs and differences in others and concern for others), social acceptance.*

(iii) Affective Needs related to Moral Development

Identification of needs for moral development of children is a controversial activity. The nations, and within them individual homes and social organizations and institutions, establish their own codes of morality. The values arrived at by one group of people may not be acceptable to other groups due to varying social, political and cultural ideologies. Consequently, the whole question of the universality of moral values and their translation into learning sequences would need to be investigated more closely.

C. AN INTEGRATED APPROACH TO MEETING THE NEEDS OF THE YOUNG CHILD

This clear formulation of the young child's learning needs needs no further elaboration. But three points, the first of which concerns THE IMPORTANCE OF THE EDUCATION OF THE SENSES to the overall development of the child's personality, must be made. The considerable importance given by Montessori to the education of the senses is well known. Interestingly enough, support to the great significance Montessori attached to the sensory-motor development of the child comes from Piaget. Piaget hypothesises that

> "...sensory-motor schema must be fully developed before higher level concepts can be achieved. In this view, the IQ and achievement deficits at school age are seen as the result of earlier and perhaps even undiagnosed sensory-motor difficulties in early childhood (Hunt, 1964; Kohlberg, 1966). Surprisingly, although this view of hierarchical deficiencies is directed towards understanding weaknesses in man's unique language and congnitive abilities, support for this view has come mainly from research on animals. This research has shown that severe perceptual and sensori-motor deprivation in very young animals results in later distorted development. Thus, the lamb who is raised without its mother will turn out to be an isolate from other sheep, will prove to be an inadequate mother to its own young, and so on. Studies on institutionalized human infants strongly reinforces this view of the damaging effects of a restricted early environment." *

Another point concerns the priority to be allocated to THE HEALTH NEEDS OF THE YOUNG CHILD in a pre-school programme. In the developing countries only the most affluent private pre-school have emulated development in the West, and their emulation has been limited by

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* Implicit Assumptions underlying Pre-school Interaction Programmes by Marion Blank in Spodek, Bernard, op. cit., p. 128.

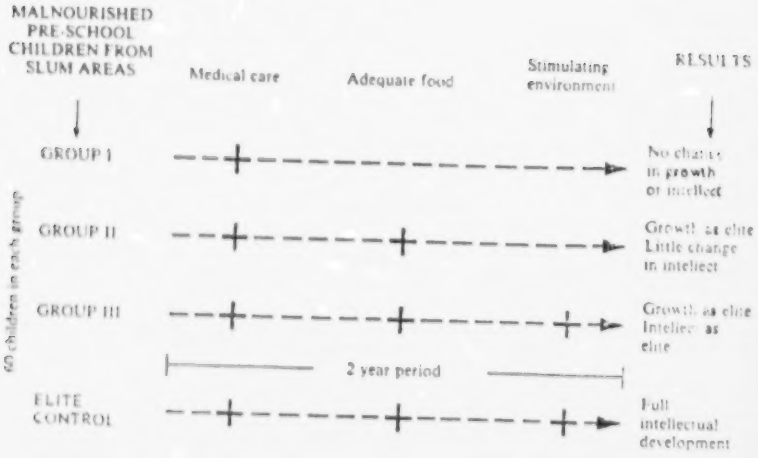
pressures to concentrate on school-like activities in preparation for formal schooling; more important though has been the need to provide health care and nutritional supplements to poor children and the need to design low-cost, logistically viable organizational structures. Because of scarce resources and limited participation by educators in these health and nutrition programmes, the education component has often been given a lower priority in developing country ECCE programmes. (2)

Any exclusively health-based approach to the education of the pre-school child runs the risk of forgetting, or at least not adequately realizing that all the physical and psycho-social needs of the child are very closely related to one another.

No doubt our understanding of how precisely they interact in a given situation or under differing home conditions is severely restricted; but there is enough evidence to suggest that best results in helping a child grow or recover from the ravages of depressing and unhealthy home conditions will accrue only when his bodily and mental needs are taken as a whole and he is given an environment in which all of these have a chance, as far as possible, to satisfy themselves collectively in close interaction with one another.

A study among a group of urban malnourished children in South America attempted to identify what were the specific needs of the under-nourished children in that community. The results of this study have been very much simplified in figure 1. (3)

Figure 1. Child Malnourishment in South America



Three groups of sixty children were studied. One received just health care, another health care and adequate nutrition, and the third health care, adequate nutrition and a stimulating environment. These three groups were compared with an elite group drawn from the children of university teachers. After two years the children in the different groups were assessed. Those who received only comprehensive health care showed no improvement either in their growth or their inttellectual development,compared with other children in the same community. The second group which had a good nutrition as well as comprehensive care grew as well as the elite, but there was little improvement in their intellectual development.

The last group which had comprenhensive care, good nutrition and a stimulating environment managed to catch up with children from the elite group. This catch-up was both in their growth and intellectual development except for some minor differences in the many psycho--metric tests undertaken.

II: THE CENTRALITY OF THE CHILD'S SPONTANEOUS ACTIVITY

The single most dominant attribute of the young child that any ECCE programme designed to respond to his learning needs must take into account is his urge for free spontaneous activity.

Regardless of the ideological orientation of its curriculum - behaviouristic, phenomenological, Piagetian or any other - a good pre-school programme must recognize the centrality of that fact.

> "The activity of the child is a determined effort to build a bridge to the surrounding world, to understand it and to change it. This is no easy task, and especially because the growing child changes his view of the world constantly. The more active the child is - the bigger his world becomes; the bigger his world becomes the greater become the possibilities for activity; the broader the areas of activity progressively become - new materials, new components, new tools -so new aspects are added and new worlds open up to the child. The tools the child has at his disposal are his muscular and sensory systems. The agents assisting him to operate these tools are the people in his environment: parents and educators, brothers and friends, acquaintances and strangers, those who love him and those who alienate him. And when he functions even only a little within his environment, when he is "independent" - he will speedily broaden his area of activity, from the wonder of "what is this?" to the enquiry of "what is this for?" and on to the ambition of, "if so -can it be done better?" The broader and greater the activity is, the more the internal

world of the child grows -and the more it grows the broader and greater his activity becomes." *

A. ATTITUDE TOWARDS PLAY

It is because of his essentially active nature, that play occupies such a vital place in the life of a child, in fact it is impossible to think of normal childhood essentially as anything but a play-dominated period of one's life.

> "Throughout the world children play, and this activity is such an important part of their lives that one is inclined to see it as the *raison d'être* of childhood. And indeed, play is vital; it conditions the harmonious physical, intellectual and effective development of a child. A child who does not play is a sick child. A child who is prevented from playing will fall ill, physically and mentally." **

> *But the misconception among some adults and teachers alike that play is a waste of time and that ECCE programmes which concentrate on the child's activity and play as the primary medium of his learning and development, are failing to exploit his potential to profit from instruction, dies hard. Parental pressures for the teaching of the 3Rs to the pre-school child derive as much from a questioning disbelief in the educational value of play as from interest in using the pre-school stage as preparatory to schooling.*

There is room for an opposite kind of misunderstanding, generally harboured by those who think that if the organizational climate of a pre-school institution is to become truly democratic and child-centred it is the

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* *The Active Child - the Learning Child - A Handbook for Kindergartens*, Study Centre for Children's Activities, Tivon, Israel, 1980, pp 6-7 (mimeo)

** *The Child and Play - Theoretical Approaches and Teaching Applications*, Educational Studies and Documents, No.34, Unesco, 1980, p.5.

teacher's responsibility to see to it that nothing ever is done or allowed to happen that has the effect of inhibiting or frustrating a child. Such an extreme position is sometimes reflected in the statements of some of the advocates of " open schooling" who insist that a good preschool curriculum can only be an "incidental" one.* May be the writings of some of the early pioneers of progressive education are to some extent to blame for this misconception. For instance, Froeble used the metaphor of the garden to explain childhood education.

> "Just as young plants and animals grow naturally according to their own laws if provided with the proper elements of nurture, so should the young child. Froebel admonishes parents and educators not to regard the human being as a piece of wax or a lump of clay that can be molded into any shape but to follow the nature of their children so that they might gain beauty in the fullness of their power.
>
> "To this end, Froebel prescribes a permissive education. Education should follow development, guarding and protecting the child. It should not direct, determine, or interfere. Such an education should be based upon freedom and self-determination. It should grow out of the child's free will rather than be imposed from the outside. (It is interesting to note that despite the assumptions of the need for freedom and self-determination in education, Froebel's kindergarten activities were highly prescriptive.)"**

We have to remember that while all children need freedom to engage in activities of their choice, this freedom has to have limits, and sometimes may not be practicable at all. In spite of everything that can be said in favour of promoting the most determined and extensive application of active teaching methods, it is to be recognised that the child himself will sometimes perceive "play as a childish activity in contrast to serious

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* A.S. Neill's wellknown "Summerhill" and the Green Valley School in Orangevill, Florida, are based on such a view.

** Spodek, B., op. cit., p.38

*adult occupations and will occasionally demand more conventional work to do, requiring a conscious and sustained effort on his part." **

*"Only in a properly-organized environment where there is a fixed place for the different objects and where they know and understand the rules can children feel secure and free to initiate, discover and learn. Freedom does not mean the absence of limitations. The absence of limitations causes uncertainty, about what is permitted and what prohibited, a state which causes the child to fear activity because he does not know what the result will be or what the reaction of the adult will be. The child is free because the adult assumes the responsibility of limiting him." ***

B. TO STRUCTURE OR NOT TO STRUCTURE THE YOUNG CHILD'S LEARNING ENVIRONMENT?

This means that a good educational environment for the young child has to represent a harmonious blend of the children's ideas and those of the adults responsible for arranging it.

The need for some unavoidable structuring of the programme is perhaps nowhere clearer than in case of a disadvantaged child or one with a handicap. It is the teacher's primary obligation in such cases to introduce the structured elements in an orderly manner according to a broadly predetermined plan.

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* *The Child and Play - Theoretical Approaches and Teaching Applications, p. 8 UNESCO 1980*

** *The Active Child - The Learning Child - A Handbook for Kindergartens, Study Centre for Children's Activities Oranim, December 1980, p. 31.*

It goes without saying that the plan has to be prepared with utmost care so that the interventions can effectively present the child with a more or less complete spectrum of educational experiences over a period of time.

C. TWO OTHER DETERMINANTS OF ECCE CURRICULUM

Though of overriding importance the ever active and developing nature of the child is but one determinant of the pre-school curriculum; two other factors will bear most closely on it, namely

(1) the cultural background and social aspirations of the child's community, and

(2) our knowledge and understanding of the subjects, activities and experiences considered suitable for his all-round development.

The cultural background of the pre-school child provides a first good test of the quality and relevance of early childhood curriculum. As pointed out elsewhere, the language and games, the songs and stories, and all the other activities that fill the child's hours in a pre-school institution may well belong to a world which for all practical purposes is foreign to him, causing severe psychological strain for his tender mind. That in fact is the case, regrettably enough, in so many of the expensive and prestigious institutions in the developing world that draw their "inspiration from the classical pre-school models of the Western world, such as Montessori, Froebel, McMillan, Oberlin, and more recently from such programmes as "Head Start"*

* The problem arising from the irrelevance of the school curriculum is well known. "Glaring anachronisms of curriculum, particularly in newly independent countries are manifold: British history may be taught rather

...

and "Sesame Street". Nor is the problem confined to the urban institutions only. Many of the ECCE programmes in the rural areas too continue to remain wedded to the 'cultural deficit' model with no desire or effort to utilize, the strengths of the cultural- and child -rearing practices in the traditional homes.*

A prominent place in the pre-school curriculum has naturally to go to THE CHILD'S ACQUISITION OF COMMUNICATION SKILLS, critical both for his socio-emotional maturation and intellectual development.

> "A child whose language development is not very advanced does not always follow clearly what is going on at school, and so behaves like a relatively backward child. As a result, children from poor families generally have less chance of success than children from wealthy families. It is this initial injustice that pre-school education can combat effectively, by helping socially under-privileged children to catch up before it is too late. Language exercises must therefore occupy an important place, so that this means of communication, essential to subsequent integration in school and in society, will be developed in all children." **

A language question of considerable importance to which attention must be drawn here concerns THE CHOICE OF THE

... than the history of the country; lessons in French geography are given instead of instruction in the geography of the local area; biology is taught with examples of flora and fauna from Europe rather than those common to the locale. In all of these examples, the curriculum is irrelevant to the social needs of the learners." (A. Lewy, op. cit., p.19).

* *Study Group Meeting on New Forms of Pre-School Education Final Report* (mimeo) (New Delhi, 25-30 April, 1983), National Council of Educational Research and Training & Unesco, p.18.

** Mialaret, G., op. cit., p 30. See also p.22 in Digest No. III of the series.

MEDIUM OF PRE-SCHOOL EDUCATION. "Since a person's mother tongue is the language in which he is most adept, in which he can best express himself, which he can best understand, it follows that it is the language in which, for him, learning can best take place." For this reason, there has developed the worldwide educational principle that "all education is best achieved when it is given through the medium of the learner's own language".*

But the adoption of minority languages as instructional media can sometimes present practical difficulties.

"Except for the few States which have only one language or which have decided on the adoption of all their languages as national, all developing nations are faced with a minority language problem. And when we consider that a country like Nigeria with possibly some 400 languages has decided to adopt only three as national, and that Kenya with some ninety-four languages has decided to adopt only one, Kiswahili, we can appreciate the scope of the minority language problem." ** The problem becomes acutest in the case of pre-school children whose mother tongue is treated as non-standard and, therefore, entirely unacceptable for educational purposes.

While it must be recognized that many languages and dialects, to be considered for educational purposes, particularly in the less-developed countries "may not have enough words to cope with a new situation or a new field of activity, but whenever this happens the simple principle for all languages, in developed and developing countries alike, is that they either create new words or borrow them from other languages".***

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* Clifford, Fyle, *National languages and cultural identity*, The Unesco Courier, July 1983, p.6

** Ibid., p. 7

*** Clifford, Fyle, op. cit., p. 6

What is of the highest importance is that a young child's home language or dialect must under no circumstances be treated as 'inferior' or in any way out-of-place in the school's work. It is the child's mother tongue alone that gives him authenticity and roots him firmly within his own community, so essential to his identity and for bonding him with others of the same culture. Not only that, as educators we have to remember that when a small child, 4 to 5 years old, is asked to follow directions, participate in discussion, make comparisons to discriminate between one thing and another, classify or draw inferences in a language other than his home tongue and which for all practical purposes is foreign to him, it is most unlikely that he will respond meaningfully.

The other important factor determining the pre-school curriculum is the decision maker's knowledge and understanding of different activities and experiences that will contribute to the all-round development of the child-psychomotor cognitive and affective.

In the main the pre-school activities, whether individual or in small groups, indoor or outdoor, having a large and dominant language component or involving considerable use of material equipment and play materials, are expected to be free and exploratory. As the child grows up, say from the age of 3 onwards, possibilities of introducing some elements of direction and structuralisation to maximize the learning opportunities for the young learner, begin to appear more frequently.

In some places the teaching of the 3 R's comes to occupy an increasingly important place at this stage, even

though the educational justification for such a practice is uncertain and far from clear.

As a single activity or group of related activities, whether planned or free, will often contribute to more than one aspect of the child's learning, psycho-motor, cognitive, social or emotional, there is no one single way of sorting out or labelling the activities neatly into separate groups. Depending upon our knowledge, organizational experience, cultural predilections and intuitive insights, the exact scheme of classification of curriculum activities, (if one has got to be adopted for descriptive or analytical purposes), could vary considerably from one national scene to another, and within the same country from one institution to another.

D. SOME SAMPLES OF ECCE CURRICULA

A handbook of suggestions for teachers of the very young from ISRAEL discusses the pre-school curriculum under these headings:*

play;
blocks;
sand,
water,
mud;
arts and crafts;
music and movement;
language;
science;
mathematics;
social studies; and
games.

*In JAPAN ** the law on education recognizes 137 possible activities from which the teacher can choose*

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* KOLUMBUS, Elinor Schulman, *Is it Tomorrow Yet? Handbook for Educators of the Very Young*, Mount Carmel Training Centre for Community Services, Haifa, 1979. See Table of Contents.

** Mialaret, G., op. cit., p. 44

according to the degree of physical and psychological maturity of the children and the local and cultural circumstances of the situation. The activities are divided into the following six categories:

(1) Health (acquiring the habits and attitudes necessary for good health, taking an interest in different kinds of physical activity and practising them spontaneously, etc.);

(2) Society (acquiring habits and attitudes desirable in social and private life; and taking an interest in the social environment);

(3) Nature (protecting animals and plants in the environment, taking interest in natural phenomena and trying to observe and understand them, taking an interest in quantities and formes etc.);

(4) Language (learning to understand what others say, learning to say what one has experienced and thought, taking an interest in picture books, picture games etc);

(5) Musical rhythms (taking pleasure in singing, learning to play a musical instrument with care, taking pleasure in movement and rhythme etc.);

(6) Drawing and manual work (taking pleasure in expression through drawing, painting and making objects, learning to use different materials and tools etc.).

The following list of 11 major activity groups sums up briefly the curriculum of a pre-school model from INDIA.

The model (Balwadi*) is particularly well adapted to conditions in some of the rural parts of that country culturally as well as in terms of costs and community co-operation.

Major Group	Sub-Group	Examples of Activities
I. Free activity	(a) Out in the open	Observing things; picking up waste and dirt; watering plants; making bricks; playing in sand etc.
	(b) Inside the school	Playing with blocks to construct houses, towers, platforms etc; placing beads or seeds on different designs; making wreaths of flowers, seeds, beads etc; filling in designs with leaves, flowers, rangoli** powder, and different grains and pulses etc.
II. Cleanliness and orderliness	(a) Personal cleanliness	To wash hands, feet, face, mouth, body etc.; treatment of scabies; to wash and comb hair,

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* See *"How to run a Balwadi"* by Smt. Anutai Vagh, Gram Bal Shiksha Kendra, Kosbad Hill, District Thana, India. A summary of the document (original in Marathi, and translated by Smt. Krishnabai Mote) appears on pp 116-123 of Digest No.II - *Battling Costs for Quality and Quantity: Emerging Responses in Early Childhood Care and Education.*

** Rangoli is an Indian artistic practice of beautifying floor space or space in front of an entrance with coloured designs using coloured powders, flowers or flower petals.

		treating for lice; to cut nails and keep them clean; using a towel to wipe hands, feet, body, hair etc.
	(b) Orderliness	To take out educational equipment and aids and after use to put them back in their proper places; to fix a place for each and every object and paste name slips.
III. School & classroom decoration		To decorate hanging archways with leaves and flowers; to arrange flower vases, to draw decorative patterns and designs on floor with flowers, shells and conches, etc.
IV. Collection of interesting objects		Collection and classification of feathers of different birds, stones of different shapes and sizes, seeds of different kinds, coloured broken glass pieces; stamps, empty matchboxes; making an album etc.
V. Gardening		To dig, to collect dry leaves and grass, to plant seeds; to draw lines and make separate beds, to cut and trim, to protect plants from goats, chickens and

		cattle, to dig and take out stones, to measure with a measuring scale, to plant seeds in a jar or a glass, to make simple experiments to learn that all plants need sun and water etc.
VI. Movement and development of muscles	(a) Large muscle movement of the body	To roll, to jump, to somersault, to swing, to slide, to climb up a ladder, to walk on a straight line, to walk on narrow wooden plank, to walk on a row of bricks, to pull or push small hand carts etc.
	(b) Self-caring habits	To take and drink water, to tie a shoe lace, to fold clothes etc.
	(c) Practical exercises of daily life	Cutting vegetables and fruits, pounding, sifting and grinding corn, straining, serving food etc.
	(d) Handicrafts	To cut with scissors, to paste, to make things from paper pulp, to make mats from grass or leaves of palm or date trees, to make things from skins of plantain treet, to make bricks, to make toys, to spin, to sew, etc.

	(e) Fine Arts	Singing, dancing to the accompaniment of music, participating in folk dances, drawing, painting and learning other creative arts for self expression.
VII.	Excursions	To visit places to observe flora and fauna, to visit workshops of carpenters, potters, ironsmiths etc. to see how they work; to visit, observe and enjoy natural places like rivers, lakes, mountains, waterfalls or a forest; to visit a place of religious interest (temple, mosque, church or gurudwara), to visit interesting places like a zoo, aviary, museum, garden, railway station, airport etc.
VII.	Language (oral mother tongue)	To speak correctly (letters, words and sentences), to listen to stories and songs, to dramatize a story, to act a play, to memorize and sing collectively nursery rhymes, folksongs, lullabies, action songs, devotional songs, etc., to describe an incident, to talk about a journey, to express one's thoughts and feelings, to ask questions of one another, to reply to questions etc.

IX. Numeration (oral arithmetic)	To count up to ten, oral arithmetical problems involving numbers one to ten, to count up to one hundred, simple operations involving addition, subtraction, multiplication and division with the help of concrete objects etc.; counting up to a thousand.
X. Social education	To work co-operatively in a group, to stand in a queue to wash one's hands, to play etc. in one's turn; to wait for an article or equipment till someone else has finished with it, to put back things neatly and properly after use; to complete one's share of the work with responsibility, to distribute personal things to the group etc.
XI. Sensory Development (also called 'science experiences')	To be organized broadly on the principles of contrast, identity and gradation, the activities aim at development of concepts relevant to the different senses: volume, shape, size and colour for sight; pitch and volume for hearing; smoth-rough, hot-cold, light-heavy for touch; and so on.

Programme activities also aim at promoting understanding of the other qualities of objects such as elasticity, porousness, strong vs. brittle, transparent vs. opaque etc. Yet another underlying purpose of the activities is to develop knowledge and understanding of the behaviour and characteristics of living things in the environment, such as vegetables, trees, plants, birds and mammals.

Among other things, the foregoing lists of pre-school activities show the things clearly:

(a) In most places there is clear recognition of the need to provide ample opportunities for creative activities - drawing, painting, graphics, cutting and pasting, clay modelling, dancing, music, role playing and dramatisation etc. as means of self-expression for the child.

(b) Play is essential for the allround development of the young learner's personality.

(c) Language experiences particularly oral exercises in communication occupy a central place in the pre-school curriculum.

As for CREATIVE ACTIVITIES FOR SELF-EXPRESSION, we need hardly remind ourselves that the goal of pre-school education is not " merely to teach the child to use the communication channels with which he is endowed for the sole purpose of receiving information from outside. He must also learn to use these communication channels to express himself and develop his creativity. A special effort has to be made in this direction to encourage the child to ' come out of his shell' and express himself, so that his personality takes shape and is built up and developed. Contrary to traditional views on education, a child's psyche is not influenced solely from the outside.

*It is by helping him to express himself and by giving him every opportunity to exercise his creative and inventive powers and his imagination that we can facilitate the full development of his personality. If education is not to be reduced to mere drill, it is essential to obtain the pupil's co-operation in his own education, even if that co-operation is of a spontaneous character and takes the form of expression and creation." * And such co-operation will for sure be forthcoming in ample measure, only if we allow the true nature of the pre-schooler to assert itself.*

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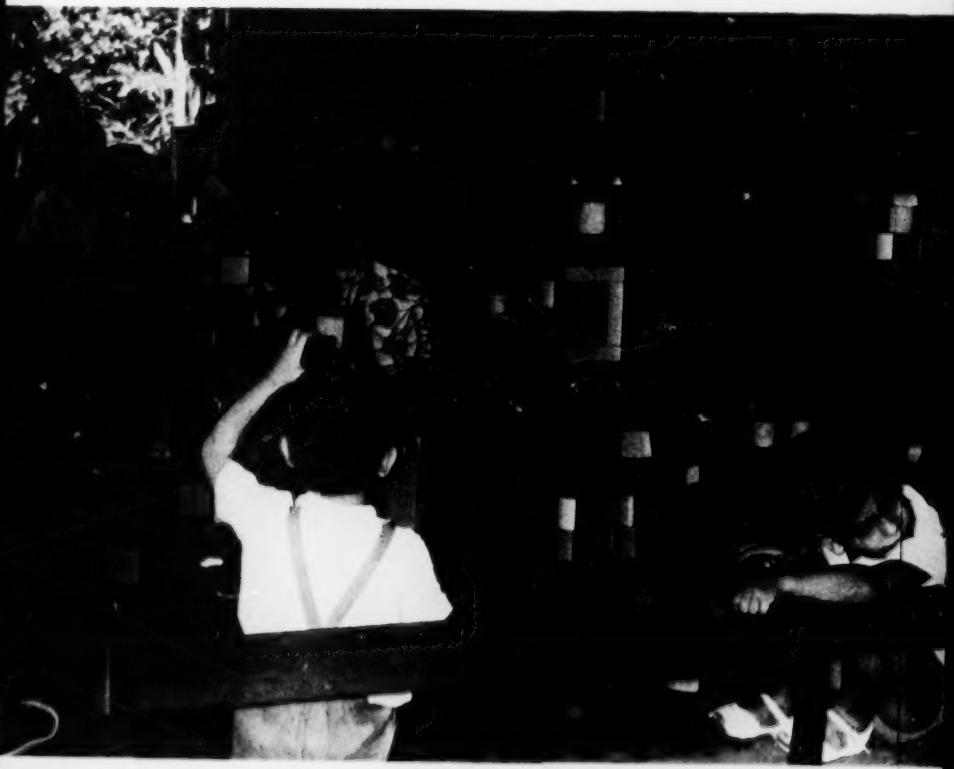
* Mialaret, G., op. cit., p. 32

CHILDREN PLAYING WITH BLOCKS IN A NURSERY IN BANGUI, CENTRAL AFRICA - UNESCO/ Louis Dure



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III: PLAY AND PLAYTHINGS

A. TYPOLOGY OF PLAY ACTIVITIES

To elaborate on the theme of play, it is important first of all to know something about the main types of play activities, the use of playthings and toys in play, and the considerations that ought to be borne in mind in selecting these playthings for educational purposes. Considering the severe resource constraints from which developing countries often suffer, it would also be pertinent to enquire if play does offer real possibilities for pre-school education in them.

Karlheins Otto* et al suggest a five-fold typology for children's play activities: (1) function play; (2) construction play; (3) role play; (4) play and games with rules; and (5) didactic play.

> Function play "...function play... when a child preoccupies himself with a certain organ of its body or with some other objects in an unspecific manner..." ...The child simply plays around in a completely unconcerned manner with the one or other thing in his environment, for example, by tearing and rolling together paper or playing around with water, perhaps moving objects around, feeling and hitting them, maybe also putting them in the mouth, throwing them down and picking them up again and so on (object-related function play). Similarly, function play includes the playish manipulation of the joints or sounds to produce the so-called babble tone (body-related function play)".
>
> "...such play often takes place without breaks over long periods of time with visible enjoyment. A further feature of the function play which differentiates it from most other play, is that - strictly speaking - there is no play action."

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* Otto, Karlheins and Schmidt, Kater (of German Democratic Republic), Sotamaa, Yrjo and Salovaara, Juhani (of Finland) Editors, *Playthings for Play*, published by AMT fur industrielle Formagestaltung (Germany) and ORNAMO, Finnish Association of Designers (1979).

"Function play effects a threefold development leap forward:

(a) it leads to a differentiation of the sense organs;
(b) it trains its motor system (initially mainly gross-motoric);
(c) it transmits varied knowledge to the children concerning the different qualities of real things, about the surface condition, weight, colour, shape, taste, warmth and cold and also about many other properties of the objects.

The significance of this sensori-motoric progress and the experience gathered by the playing child with regard to contents cannot be evaluated too highly, all the more as this progress takes place over a relatively short period of time..."

Construction play "Characteristic of the construction play - as opposed to the function play - is no longer the pure movement and action but, above all, the purposeful action undertaken with an eye on a certain object.

"... the main motive of the construction play is to exert an active influence on the object of the action, transforming it and, in the process, creating something new. Construction play, consequently, contains an element of creative urge, of creativeness. This is generally always the case irrespective of whether we are concerned with simple action with sand and water, with plastics, clay and wax, with paint brush and colour, paper and scissors, building bricks of various kinds or even, in the final anaysis, with the much more technically complicated play materials such as of electric building sets. It is, however, important to note, whatever the playthings are they remain the object of play...

"The central pattern of objective requirements of construction play is, above all, the following: if the child wants to achieve a certain product in play it needs certain specific materials (for instance perhaps wood or nails), certain means and methods (perhaps a hammer or pliers), certain outer conditions (perhaps a shed or hobby-room), various partial or intermediate actions, that is to say an action hierarchy, etc. All this requires from the child, as the subjective preconditions for the successful sequence of construction play, a clear, pre-envisaged, planned, constructive-creative pattern of thought and action as well as patience, perseverance, self-control and a close emotional connection to the object of the paly. And it is precisely these properties that are developed in the process of play because they are necessary for the subjective fulfilment of the objective requirements of consturction play.

"Often such experiences prove very painful for the child and may even turn out to be shocking and startling. In this process there sometimes even arise highly traumatic situations in which the child bursts into tears, becomes angry and even destructive in his attitude to the object of the game if his wishes are not realized immediately. These experiences, however disappointing and frustrating they may be for the child, do have an extremely positive effect on the formation of the personality if the child can cope with them and digest them in a progressive way.

"... the child will finally attain the point of transition from play to work activity, from play behaviour to work behaviour."

Role play "As opposed to the construction play where the child devotes his attention first and foremost to real objects and their handling in play, the main contents of role play and their motivations are - as their name indicates -the imitation and reflection of some kind of social role of adults in society. This is so, irrespective of whether the child takes a piece of wood and plays as "smoker" or plays other roles such as "family", "school", as a "soldier" or "railway worker", etc. Morover, it does not matter if the child plays alone or with friends, with or without playing materials.

"The principal motive causing a child to engage in such play must... be derived from a basic contradiction. In principle, this contradiction asserts, on the one hand, the desire of the child to realize himself activities and corresponding social relations observed in the case of adults. On the other hand the child is confronted with a situation in which for many reasons the possibilities do not yet exist to translate this inclination into reality. The resolving of this contradiction ensues in the role play which, so to speak, provides the child with a commensurate and attainable level to realise the...role. For that reason role play possesses important topical experience value for the child; they simultaneously are of precisely very great significance for the psychic development of the personality and the future citizen.

"Apart from all these, role play renders quite specific and central contributions to the development of the personality, namely that thereby the child makes a whole number of experiences of a social nature, perceives social norms and comprehends social characteristics besides developing the ability to subordinate or superpose or arrange himself according to the specific playing role and situation

he similarly learns to respect and take into consideration the interests of his play partners and the play group. In this manner the child gradually overcomes his egocentric behaviour and develops the pre-conditions for life and activity in society.

Games with rules "... (play and) games with rules are a sort of further development of the role play. The similarity between role and rule play is, above all, that in both cases social rules play a central role. In the role play these rules function in secrecy, that is to say the rules are so to speak, unspokenly inherent. Thus, for example, in the role play the behaviour of the doctor and the patient, the officer and the soldier, the engine driver and the passenger are controlled by quite specific inherent norms and rules with virtually no deviation allowed for by the children without - literally - transcending the role, that is to say "dismembering it".

"Typical for the games with rules is, on the other hand - and that is the origin of its name -that the playing rules are publicly and clearly indicated, moreover, that they clearly and directly determine the course of play. The rules, so to speak, constitute the essential life element of this play and if in any way violated the play loses its sense and breaks down.

"The games with rules also possess an exceedingly great significance, hardly to be underestimated, for the overall personality development of the child. The sub-group "movement games" contributes, above all , to the training

of body movements and towards the aesthetic education of the children as these games are often associated and connected with songs and rhythm. Games with rules such as various board and card types particularly in their complicated and higher forms, impose high demands of a special nature in respect of the various cognitive processes such as memory, the perceiving of essential connections, speedy combining and reacting, etc. In this manner they most certainly promote the mental development of the child.

Didactic play "Didactic play is an extensive, manifold and exceptionally important category of play. And yet -assessed in accordance with its activity pattern -it does not actually constitute a special and independent type of play. It contains far more elements in principle, from all previously cited types of play under a new and central aspect, namely to employ the plays purposefully for certain educational goals.

"...this play provides an opportunity to guide the activity of the children purposefully, in a planned and systematic way without regimenting it.

Didactic play can assume the character of function, construction, role and various rule play. This depends always on the specific educational goals. Mainly, therefore, this play is grouped thematically according to certain didactic viewpoints into play complexes. Thus there are didactic plays:

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- *to train attentiveness*
- *to develop senses of time and vision*
- *to train observation skills*
- *to promote quick reaction*
- *to train speaking skills (tongue twisters)*
- *for the creative assumption of roles within the group*
- *to gain collective skills*
- *to become conscious of one's own possibilities, etc, etc."*

B. RELATIONSHIP BETWEEN REALITY AND IMAGINATION IN CHILDREN'S PLAY

"The clarification of these problems possesses cardinal importance for understanding children's play; yet, there is hardly another aspect of children's play that is more frequently subject to misunderstanding than this one. Even today parents and educationalists very often tend not to respect children's play too much because they assume that it is only the product of pure fiction, fantasy and illusion. In reality, there do exist features of children's playing which might easily give rise to such an interpretation -for instance, when a child incorporates one and the same stick into his play as horse, a gun or a tower.

"The relationship of the child to reality is of primary importance as reflected in the content of the playing. Many experiments and everyday experiences testify that this is clearly the case. When, for example, the children play at 'doctor' then... from early pre-school age onwards, they do not allow themselves to be deviated from a certain and precise sequence, for example during the 'injection process' -pre-supposing, however, that the children are able, in a cognitive way, to perceive the corresponding interrelations.

The logic of reality, thus, is strongly formed in the content of play, moreover often adhered to in greatest detail. Quite frequently one may observe how the children

burst into tears or are extremely upset if unattentive playing partners or tactless parents ignore the inner validity of the reality relationship in playing". (4)

C. PLAYTHINGS AND PLAY MATERIALS

Generally speaking, playthings are all those things which the child incorporates into his play activities. hence, in the widest sense, playthings and play materials could include:

- *objects which the child uses for play, but which were originally not produced for this specific purpose; i.e. in terms of their essential functions, are not recognized as playthings as such. (For example, such items as stones, sticks, wooden carvings, items of clothing, crockery, simple tools and many other things besides, that are around the child and accessible to him, to play with are playthings);*

- *objects other than those which adults have prepared consciously for children as playthings, to be used by children individually or in groups for their play activities -for example, modelling clay, blocks of wood, cut-outs, etc.;*

- *objects which are not necessarily always mass-produced or produced in a graded sequence;*

- *objects produced by the parents for the young child, or by his brother or sister for him to play with;*

- *objects prepared by the child himself;*

- *objects that are mass-produced as "children's toys".* (5)

What considerations should one bear in mind in selecting playthings and play materials for very young children?

A simple three-fold criterion deserves consideration: relevance to fantasization; safety and the child's partiality for familiar objects.

Fantasy: Children can use the simplest materials to represent the most sophisticated things. A few cardboard boxes can be a house, a car, a boat or an aeroplane. There is no need for realism in the design of toys, in fact an item that can only be identified as a car will have less use to the child by limiting the range of his or her imagination.

Safety: Obviously sharp, pointed objects should be avoided. Scissors are only safe with supervision and should have rounded ends; UNICEF supplies a suitable one from Copenhagen warehouse, UNIPAC No. 2555000. For the very young, objects should be too large to swallow and should be safe to put in the mouth. It is best to avoid painted or metal items for very young children.

Children cannot and should not be sheltered from all hazards, they have to learn to live in a somewhat hazardous world. Climbing frames can be made of bamboo, and other materials. If the maximum height is 1½ metres and the frame is over grass or a sand-pit, there is little danger. Care should be taken in the design and construction of climbing frames, ropes and nets, see-saws and swings so that if a child should fall, he is unlikely to be hurt. Sharp edges and projections must be avoided.

Familiar things: Children widen their experience slowly. If too many unfamiliar things and situations confront a child, there is confusion and even fear. Particularly in organised day-care centres and pre-schools, every effort should be made to introduce children gently into a new world of experience.

It is perhaps for this reason that Indian pre-school educators in rural and urban areas have found that associating pre-schools with primary schools has been so rewarding. Older brothers and particularly sisters can be near at hand when the young child meets new people and things. For the same reason there is a great deal to be gained by using familiar household items for play and experience development. (6)

D. OPPORTUNITIES FOR PLAY IN THE DEVELOPING COUNTRIES

By and large, the situation in the developing countries seems to be quite favourable to the use of child's play for developmental purposes, at least psychologically and educationally speaking. For instance, the scientifically and technologically influenced living environment is increasingly becoming standardized, often uniform and sterile, de-limiting the possibilities of play action for the child. As against this, the primitive and simple living environment, especially in rural areas, is not only mildly influenced by technology, but varied in the context of the natural needs of children. Hence it is "rich" with possibilities for play. (7)

In the industrialized countries, the children as well as adults are essentially members of consumer groups, consuming commercially-produced items, but having little knowledge of the underlying production processes. Children use commercially produced toys and diverse play materials and have little opportunity to see them actually being produced, even though the play-things are often scientifically designed. It is true a similar tendency is developing in the developing countries, but as yet its extent is very limited. Hence, there are opportunities for children to see the world of work and more often than in the developed world, to see things being made - even though the things may not be scientifically designed. (8)

Further though in the richer countries play materials with versatility are being designed for children to work with, they scarcely have any opportunities left to make their own toys.

Their environment is full of a variety of materials, but at the same time, simple, basic materials suitable for a young child to use are often difficult to obtain. For some town children even heaps of "odds and ends" are gradually disappearing. As for tools, there is often an obsession with safety - children being given wooden hammers and plastic saws, a paltry substitute for the real thing. As against this the situation in the Third World countries is that such "tendencies have grown to only a minimal extent, and dumps of "junk" of varied types still exist. The "primitive" village parents are still not obsessed with safety and allow their children to participate in work with pleasure, thus making simple work, "play". (9)

(i) Common "street" games

What tilts the scale even more to the advantage of children from the developing countries is the easy availability of common street games which Nico van Oudenhoven regards as a natural resource of considerable educational potential.

> Common street games are well-known games, that are played by everybody, boys and girls, children and adults. They are played in fields, on the streets or at home, and have been known for generations in many cases. Common street games exist everywhere, in every country. The games are so numerous, colourful and original that a description of them will please anyone who has an interest in childhood, games, or a concern for their impact on education and culture. Hundreds of games can usually be seen in any region or country, each game being an illustration in miniature of its culture and civilization.
>
> In many industrialized countries, most of their street games have already disappeared without trace. Sadly enough, the same misfortune is overtaking the developing countries where "Western" education is widely adopted.

In these countries children often seem to have stopped playing, as if they were trapped in a vacuum created by the disappearance of the old, traditional, mainly non-formal ways of education and the superceding of those by an alien and inappropriate system of education.

There are in the developing world hundreds and hundreds of common "street" games which are of a wide variety in nature, complexity and learning potential. Any nation-wide research will reveal an abundance of such games. An analysis of these games suggests strongly that they can be successful educational tools.

Usually the "street" games are:

- *Very cheap. The materials needed are often sand, pebbles and sticks and the like, which are freely available every-where.*

- *Highly loaded by intrinsic motivation. They are games!*

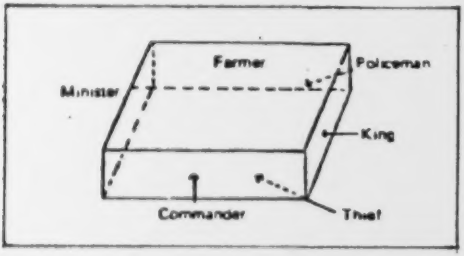
- *Touching and dealing with all aspects of human development: motor; cognitive; emotional; moral and social behaviour.*

- *Easy to learn and to teach. The teacher will not face any difficulties in dealing with these teaching aids.*

- *The abundance of games guarantees a splendid gradation and diversification to suit different age groups - from kindergarten up to and including adults, for both sexes and for small and large groups.*

- *The rules of the games are easy to modify and to adapt to different classroom situations. (10)*

As an illustration take Playing Thief. "This is an Afghan game which is based on role-playing. Four to six children take a matchbox and give names of public authorities and figures to each side of it. There are always a thief, a policeman and a judge or a commander or some other public person.



One of the players takes the matchbox and tosses it up. While it is in the air he asks "Who am I?". He becomes whichever name is on top after the box lands. Each person does this until everybody has a name. If the same comes up, the player has to toss it again until he gets a name not yet taken. When everyone has a name the play begins.

The farmer goes to the commander and complains that his horse (or something else) was stolen by somebody. The commander sends the policeman to find the thief. The policeman brings the thief to the commander for questioning. The commander then sends the thief to the minister. The minister sends the thief to the king. Finally, the players hold a meeting to decide whether the thief was guilty or innocent. They may decide to punish him or free him".

Numerous studies have demonstrated that an increase in the ability to abstract is a most needed condition for further growth. Development of the ability to work with

symbols as well as fantasy and imagination or language and creativity is either related to or based upon the ability to abstract, which is the capacity to pull oneself apart from the situation which is immediately given. Games stimulate this process. By means of games children are able to escape from their immediate concrete environment. By playing they become free, not only emotionally, but also morally or cognitively.

In games, children - and also adults - manipulate their situation, which shows they are abstracting from it. Without this abstraction no manipulation or playing can take place. The game "Playing Thief" gives children the opportunity to take different roles, to become a king, a thief or a commander. The game enables them to remove themselves from their actual roles, e.g. farmers' daughters, and to become more versatile.

One of the main causes which seem to hamper cognitive and emotional development of poor children is the LACK OF OPPORTUNITIES FOR THEM TO ABSTRACT THEMSELVES FROM THEIR IMMEDIATE SITUATION AND TO REARRANGE THEIR PERSPECTIVES ON THEIR OWN LIVES, MODES OF BEHAVIOUR, THINKING AND ATTITUDES. Studies of the daily lives of these children show this very pertinently. Most children, even at a very young age, are most of the time involved in all kinds of concrete activities like taking care of younger children, doing errands, cleaning the house, tending goats or helping their parents in various ways. Most of their time passes by monotonously and seldom do they have time to play.

Although important, abstract thinking and manipulating one's environment are not the only aims of education. Character building, effective development, social behaviour are as important and even more valuable than many cognitively oriented educational aims. Common street games take these aspects of human development into account as well. "Playing Thief" is a good illustration of how aggressive behaviour can be brought under control. Punishment of the thief will never be extreme because if one child decides to be very aggressive, when he becomes the thief, he can expect revenge. (11)

(ii) Setting up a bank of street games

Nico Van Oudenhoven suggests that a developing country should seriously consider establishing a bank of common street games.

> The process consists basically of asking as many people as possible in the various parts of the country to write up or tell the games they know of and to motivate them to ask the same of their friends and acquaintances. The inclusion of people of various backgrounds and experiences increases the chances of a rich harvest: shop keepers, taxi-drivers, farmers, mechanics or housewives are often more productive than students or teachers. It is obvious that a small reward for each game delivered will increase the yield.
> It is essential to insure the co-operation of people representing the different regions or sub-regions of the country as many games as are locally found. A rule of thumb is to stop the search for games when only the known games are being brought in.*

The educational value of games can be increased if they can be ordered according to age level and function. In this case a teacher can just

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* Collecting games could be as useful project for a group of student teachers.

look under a particular category, check the appropriate age level and make her choice. An easy way to do this is to have a group of experienced teachers and educators discuss the games and categorize them according to a previously agreed upon list of functions. Together with the age level, it is possible to make a matrix which may look like this:

Functions / Age Levels	Co-operation	Construction	Imagination	Verbalization	Music and Rhythm	Physical Flexibility	Physical Fitness	Socialization	Probability Guessing
Under 4 Years									
4 Years and Older									
5 Years and Older									
6 Years and Older									
7 Years and Older									
8 Years and Older									
9 Years and Older									
10 Years and Older									

Depending on the particular interest, many other functions can be listed such as stimulation of arithmetic skills, writing, visual perception and the like.
Since one game may carry more than one function, it is quite possible that the same game may be found under different categories: "Playing Thief" could thus be put under "Fantasy" and "Socialization".
Each game is given a number and the number placed in the appropriate box(es).

Once a matrix has been filled in, a teacher just has to select the particular function she wants to develop, knowing the age level of her students, and make her choice. It may be useful to write each game on a numbered index card, which in addition to age level and functions indicates whether they are played alone, in twosomes or in groups. It is thus an easy step from a series of index cards to the production of a simple booklet. (12)

(iii) A game of silence

The child's need for rest from time to time and in an all-day programme, for sleep (nap-time) during the day are to be recognized as much as his need for activity.

"The young child of four or five grows tired quickly. Once his fatigue threshold is passed, he may react either by obvious inactivity and a lack of interest for group activities, or by instability or aggressivity incompatible with group life. The child who has gone beyond his fatigue threshold loses control of his reactions and becomes what is usually called "impossible".

*"The teacher must be particularly sensitive to tiredness in the children and be ready to interrupt an over-long activity, modify the rhythm of the group, change the activity or introduce a rest period. There is no absolute rule about this; the teacher's discernment, supported by thorough training, is the major factor for success." **

But does the child also have use for quiet and silence, even though for a very short while? If so, how to provide for it? Anutai Vagh is a great believer in the educational merit of the child's experience of silence and calls it 'a game of silence'. Her reasoning to provide for it on the time-table and suggestions for how to arrange it speak for themselves.

* Mialaret, G., op. cit., p 43

CHILDREN IN AN ECCE CENTRE

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"We know now what activities should be taken in Balwadi to develop and achieve co-ordination and control of various muscular movements. It is an important part of Balwadi training to give full scope for muscular movements of all types to develop. However, it is equally important to sit quietly and learn to give all the muscles complete rest. To sit even for a minute without any movement requires great effort and self control. Most children are in the habit of moving hands, legs, faces and the whole body quite unnecessarily. If they remain quiet and relaxed for some minutes they feel rested -peaceful. That is why this game is called a game of silence or peace. The game of silence gives them practice in inhibition of movements at will.

"This game of silence as practised in a Balwadi or Balmandir is worth watching. All the doors are closed. Windows have blue curtains. The room is full of sweet fragrance of incense burning. In the dark the burning ends of incense sticks look deep pink. It is very quiet and peaceful everywhere in the room.

"Very young children sit quietly. They sit on the floor with legs folded, back quiet straight, their hands on both thighs, their necks and heads are quite straight in a line. Some children close their eyes like a yogi in meditation. Some close their eyes with hands because eyes refuse to get closed. Some keep their eyes open and see how the other children are keeping quiet, how the incense stick looks while it is burning, however, they too often try to close their eyes. Some get quite awed by the peaceful atmosphere. What they hear is the ticking of a clock and soft breathing sounds of children's quiet breathing. Sounds from outside like chirping of birds or a wind passing through leaves, motor horns and also the voice of the teacher

giving suggestions become sharply audible. This game helps them to learn the art of concentration, saves energy and gives control over their movements by the exercise of will power.

"This game of silence can be taken any time in a Balwadi. However, when the whole atomosphere gets a bit restless the practice of this game is very desirable. What we need for this game is the quiet atmosphere, a little darkness all over and sweet fragrance in the air. To ensure peaceful atmosphere, doors are closed, fragrant flowers are kept in the room and also incense stick is kept burning.

"How to play this game? First, all the children should be informed of this game and in view of that all the movements should be made slow and sounds also should be as low as possible. For instance, if a teacher asks a child to close the door the child will go very quietly and slowly and close the door without making any noise. The teacher also gives his instructions in a very quiet tone. When all children come into the room and the doors and windows are closed, the game should be started. In the beginning only, children are told that the teacher will clap twice and on the first clap they should be all ready and on the second clap they all must close their eyes for a minute. When the teacher claps again after some time they have to open their eyes. In the beginning the teacher should give demonstrations of how to sit quiet and what posture should be taken and then the children should be asked to do the same way. In the beginning when the children are not fully initiated into this game, they cannot sit quiet for a long time; so the teacher should ask them to open their eyes after a minute or two. Once they are initiated, the time can be increased.

The technique of the game must be carefully mastered by a Balwadi teacher. To achieve control over our movements is not an easy thing.

"After this game of silence the Balwadi teacher can introduce games which can be played without making any noise e.g. -to go round the circle of children without making noise; to change places without making noise; to whisper a story to someone else and so on.

"When children are quiet and silent, their attention is drawn to several sounds. They should remeber them and later on repeat them in a very low quiet tone. This game is very educative from the point of view of teaching various sounds. Very often all sorts of sounds like sound of bangles, alarm of a clock, chirping of various birds are introduced to acquaint children with various sounds.

"After this game children should quietly get up and open the doors and windows." *

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* Vagh, Anutai, *How to run a Balwadi*, Kosbad-Hill, District Thana, 401703, India, 1977, p. 97.

IV. EARLY INSTRUCTION - AN ASSESSMENT

To conclude this elaboration of the pre-school activities, we must return to the child's language experiences, whose importance in the pre-school curriculum can hardly be exaggerated. A major problem here concerns whether or not the curriculum should provide for the formal teaching of reading, writing and numeracy. A reference to the problem has already been made elsewhere; * the proposal here is to present some of the research evidence and major arguments having a bearing on either side of the debate. While it is realized that the problem is essentially socio-cultural, in that it is primarily the parental demand which in most places underlies and supports the formal practice of teaching the 3Rs, a look at some of the relevant research findings will at least contribute to an improved assessment of the issues involved.

A. ARGUMENTS IN FAVOUR OF EARLY INSTRUCTION

To take up the evidence and arguments in favour of early instruction first, there need be little question that most parents press for "reading readiness" because it prepares children for reading instruction. The readiness skills may have no importance in themselves, but the parents demand them because they prepare children for later school work. To such parents, if a pre-school instruction instead of getting children moving up the academic ladder only encourages them to waste time in play and free recreational activities, it is failing in one of its key responsibilities which is to instruct them.

But do young children have the capacity to respond to instructional stimulation? Berlyne definitely thinks so.

> "Recent psychological research concurs with the experience of educators around the world in suggesting that the rate at which the average child,

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* See Digest No. I: Our Future is in our Children, p.13

EARLY INSTRUCTION - LEARNING TO WRITE IN PRE-SCHOOL

let alone the gifted child, can advance has been grossly underestimated, with unfortunate consequences... Above all, there was a grave underestimation of the extent to which the ordinary child can find intellectual substance appetizing and intellectual effort satisfying, provided they are introduced at the right time and in the right way."*

The behaviouristic way of thinking lends ready support to such a position. According to this school of thought "Readiness is not a fixed attribute of the child but rather is always relative to our ingenuity in constructing materials appropriate to the child's level of development. This position was given elegant expression in Bruner's now famous phrase:

We begin with the hypothesis that any subject can be taught effectively in some intellectually honest form to any child at any stage of development."

"One of the most vocal and research-oriented spokesmen of the instruction position for the pre-schooler is W. Fowler. In Fowler's view, and he has data to support his contentions, early intellectual stimulation results in superior achievement that is maintained throught the elementary school years without negative personality or social effects. Fowler has been particularly involved in attempts at early reading instruction, as has another prominent advocate of early instruction, O.K. Moore. For these writers, readiness is a term that merely expresses our ignorance regarding the methods of effectively programming instruction, and once the appropriate programmes are available children, it will be discovered, are "ready" to read and write before the first grade."*

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* Elkind, David, *Pre-School Education: Enrichment or Instruction?*, p.113 in Spodek, B., op. cit. see also Fowler, W., *The effect of Early Stimulation in the*

B. ARGUMENTS AGAINST EARLY INSTRUCTION

Coming to the arguments against the early teaching of reading and writing, perhaps the strongest is the one that insists that children will not respond to it as they are not mature enough for the purpose.

> "We know that a few are ready to read at five but that that the great majority age of six and one-half or over is necessary for reading with understanding. We are told, again, and again, to expect a four-year range of ability when children enter first grade. Oculists warn us that most children's eyes are not mature enough even at six for close application to print and figures." *

Equally weighty is the argument arising from pressures which early instruction supposedly creates for young children.

> "Wherever we go in the world, we hear talk about pressures that grownups are under. At the very time we bemoan pressures to behave in a socialized way; to be popular -to belong to the group; to achieve in school and get to college; to hold their own in a competitive world; to take advantage of all the advantages; to live in a world which even grownups cannot say is safe and secure. As if these pressures were not enough for our children to face, many adults are adding to pressures in the name of education... Their motivation is right, their realization for the need of intelligent and productive manpower is right, but their knowledge

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... *the Emergence of Cognitive Processes.* Reprinted from Robert D. Hess and Roberta Meyer Bear (Eds.), *Early Education, pp 9-36.* Chicago: Aldine Publishing Co., 1968; as quoted by Elkind, D., ibid., p. 116.

* *Keliher, A.V., Do we Push Children, Childhood Education* (1960), 37. pp. 108-112, as quoted by Elkind, D., op. cit., p.112

of children and how they grow and develop is inadequate.*

There is also the fear that ealry instruction, even when successful, could well have the effect of lowering the limits of the child's ultimate achievement.

> "Although the retardation of the disavantaged child is frequently stressed, his prematurity in other respects must not be overlooked. In many ways these children take responsibility very early for their younger siblings and they learn the realities of life at a much earlier age. Many are shrewd and cunning beyond their years at least in the ways of human interaction. One consequence of this premature development was elegantly illustrated by Freud's remark when he was asked what became of the clever shoeshine boys who abounded in the streets. Freud's reply was, "They become cobblers." Piaget made a similar remark when he pointed out that kittens take three months to attain object conservation, whereas it takes a human infant nine months: "The child takes longer but he goes further so the nine months were not for nothing." The point is, early instruction if it brings maturity too soon may, or at least could, lower the limits of the child's ultimate achievement."**

C. FINDINGS OF AN EXPERIMENTAL PROJECT

These and similar arguments against the feasibility and appropriateness of teaching the 3Rs at the pre-school stage have been challenged among others by Bereiter and Engelmann. Adopting an essentially behaviouristic model, they developed a pre-school programme for disadvantaged children, around "three daily 20-minute sessions of intensive direct instruction -one devoted to language learning, one to arithmetic, and one to reading. The distinctive characteristics of the instructional method are:

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* Jenkins, G.G., *What price Pressures, Childhood Education* (1060), 37, pp 53-60, as quoted by Elkind, D., ibid., p. 114

** Elkind., ibid., p 119

1. Fast pace. During a twenty-minute period as many as 500 responses may be required of each child. Usually five or more different kinds of tasks are presented during a single period.

2. Reduced task-irrelevant behaviour. The teacher controls the session relying only incidentally on spontaneous exchanges to dictate the direction of instruction. Efforts of both teacher and children are focused on the tasks being studied.

3. Strong emphasis on verbal responses. These are often produced in unison, so that each child's total output can be maximised.

4. Carefully planned small-step instructional units with continual feedback. The teacher is not receptive to irrelevant exchanges but is very sensitive to possible areas of difficulty, possible ambiguities that arise from her presentation. She quickly corrects mistakes. She tries to anticipate and avert them.

5. Heavy work demands. Children are required to pay attention and to work hard. They are rewarded for thinking; half-hearted or careless performance is not tolerated." *

By the time the findings were reported, approximately 150 disadvantaged children had taken part in the programme. Bereiter and Englemann claim that the instructional programme did not cause any "excessive stress and anxiety" among young learners; nor any "dislike for school and learning; nor did it result in any "lack of spontaneity, independence, and creativity". On the contrary, the children made ostentible gains along intellectual and other personality dimensions. In their own words:

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* Bereiter, C. and Englemann, S., *Observation on The Use of Direct Instruction with Young Disadvantaged Children*, in Spodek, op. cit., p 117

"Excessive Stress and Anxiety *

The mounting pressures on school children to compete and achieve are a just cause for concern. We have tried to minimize competition and emphasis on error avoidance, placing the emphasis instead on hard work, attention, and improvement. Exertion in itself -as shown by children at a playground or swimming pool - does not seem to be either harmful or unnatural. After a morning of spaced sessions of intense "mental" exertion, the children show many of the same characteristics as children who have spent the same length of time in intense physical play. They are tired but relaxed and cheerful

Among the children whom we have observed most closely there have not been more than the usual number of anxiety symptoms. When an occasional child has shown signs of mounting disturbance in school, he was almost invariably attempting a task for which he was inadequately prepared; the disturbance generally abated as soon as the learning problem was taken care of, usually by some modification in the instructional programme that proved to be of benefit to the other children as well.

"If anything, the stable and work-oriented atmosphere of the school seems to have made it an island of security. The home lives of many of the children have been chaotic and filled with violence. During the eraly months of the school the behaviour of the children clearly reflected the ebb and flow of crises in the home neighbourhood. As time went on, however, their school behaviour became more and more equable and independent of outside influences. Recently close relatives of three of the children in one class were involved in a sensational killing; yet, hardly a ripple of the turmoil invaded the classroom.

* Ibid., p. 183

"Dislike for School and Learning

Starting children too young in academic work has often been blamed for school failures and the development of a chronic dislike for school. The writers fully acknowledge the dangers in presenting young children tasks for which they lack the prerequisite learning, and for this reason would urge that direct teaching not be attempted without a carefully worked out curriculum that starts with the abilities the children already have, building up from that point in a way that insures that the children can handle each task that is presented.

"However, our experience does not suggest, that early exposure to academic instruction *per se* develops negative attitudes toward schooling. What it does, rather, is build up attitudes toward school work that should provide a basis for better adjustment to school in later years. Direct instruction is not as much fun as some other kinds of nursery school activities, but we do not know of any responsible early childhood educators who use "maximizing fun" as a major criterion for designing a curriculum. Most children seem to enjoy direct instruction most of the time, so long as it is enabling them to make steady progress; but what is more important, they learn that it is worthwhile and that it will bring them benefits even when it is not great fun. Thus they develop a more mature kind of motivation toward learning that can sustain them through the inevitable ups and downs of school experience.

"Lack of Spontaneity, Independence, and Creativity

Although the kind of instruction we have used is highly controlled and makes a great deal of use of repetition and patterned responses, the children have shown a general increase rather than decrease in the spontaneity with which they approach new tasks. Like many groups of disdvantaged children,

the ones in the pilot experiment were initially rather stolid and self-effacing, lacking in curiosity and intellectual assertiveness. Over the months they have become bold, inquisitive, and argumentative, confident of their intellectual strengths.

"The curriculum we have used includes a number of divergent thinking tasks - from thinking of things that are not weapons, inventing new verses for songs, devising possible uses for an unfamiliar object such as a tea strainer. The children approach these tasks with considerable alacrity. Training in divergent thinking does not occupy a major place in the program, but this is a curricular decision and is not dictated by the teaching method. From what little is known about methods of fostering creative thinking, it would seem that direct instruction in divergent thinking tasks should be a better means of promoting creative abilities than the conventional unstructured nursery school activities, which may provide a child with opportunities to think creatively but selfom challenge him to do so, or teach him much about how to do it." *

As a group of 150 children may not be a sufficiently large sample to draw firm conclusions from, such a programme calls for replication in cross-cultural settings to test the validity of these claims. If the findings reported by Bereiter and Englemann could be tested and generalized, they would indeed provide a most impressive justification in support of the widespread practice of formal instruction in pre-school years.

* Bereiter, C. and Englemann, S., op. cit., p. 185

D. ISSUES TO BE FURTHER STUDIED

In the meantime assuming that the findings have been reported with reasonable accuracy and objectivity, it is pertinent to enquire what kind of qualifications and competencies for formal instruction did the teachers of this particular programme have? How do these compare with the competencies of the ordinary run of pre-school teachers available for such work in the rural and disadvantaged areas? If a programme makes difficult or exceptional demands on teacher competencies, its generalization or further extension can easily run into serious practical difficulties. Of course this is not to gansay that whatever can be done to upgrade the instructional and other skills of the teacher through training and reorientation must receive every support and encouragement; but that is a different matter.

Further, while recognizing the difficulties of mounting follow-up or longitudinal studies in education, one must nevertheless enquire how enduring were the gains or behavioural changes reported by Bereiter and Englemann? The point is important for in many investigation inspired by the behaviouristic way of thinking, the researcher tends to concentrate on the short-term change, forgetting that to have educational significance, a behavioural change must last a reasonable length of time.

And finally someone could legitimately enquire: Is the time spent on formal instruction the best use for such time? Assuming on an average day it would hardly be possible to spend more than an hour or so in formal instruction, would it not be a better alternative to spend this time in helping the child form concepts and acquire language skills?

E. SOME PRACTICAL HINTS

In spite of the support that pre-school instruction in 3Rs receives from parents the world over, the question whether such instruction is also in the best developmental interest of the child himself, must, therefore, be regarded as an open one. We seem to need a considerable quantity of carefully designed research, particularly longitudinal research, to throw fresh light on the issues involved.

In the meantime and as a matter of practical guidance, we shall do well to remind ourselves that children vary widely in their ability to learn and in their physical capabilities. Many children under five years of age will not have sufficient control of their hands to enable them to write well. Very many will not be ready to absorb the symbolism of letters and numbers. To regiment groups of children to read, write and do simple arithmetic is usually wrong. But to give opportunities to do these things will be very helpful to those ready to do so.

To improve manual dexterity, as a prerequisite for writing, every opportunity should be given to use the hands for drawing, painting, modelling and manipulation of materials. Counting of objects such as seeds, sea shells and stones should be encouraged and letters and numbers should be written on blocks, charts and pictures in association with familiar materials. A picture of five ducks, with symbol 5 is an example. The alphabet with simple words starting with each letter is another. If teachers, parents and other older people draw attention to these symbols in story telling and other activities it will soon be apparent when the children are ready to learn in a more formal way. For this purpose, again, carefully designed toys and other learning materials will be of very significant help. (13)

V DAILY SCHEDULES

A. MAIN FACTORS TO BE CONSIDERED IN DESIGNING THE DAILY SCHEDULES

What kind of daily schedules or time-tables do pres-school institutions generally follow? Predictably enough the 1974 Unesco World Survey of Pre-School Education revealed that in many countries "pre-school institutions were open only in the morning (2 to 3 hours, on an average) so as to give the children time for a rest at midday and to avoid tiring them physically and/or intelectually, and that the time-tables varied considerably".* A typical half-day schedule could be as follows:

"8.00 a.m.	Arrival of children (reception)
8.15 a.m.	Group meeting for general conversation (pledge, prayer, news songs)
8.30 a.m.	Free time (creative activities, block building, etc.)
9.25 a.m.	Clean-up time (children help to put away toys and equipment and to straighten up the room)
9.40 a.m.	Group meeting for teaching concepts
10.10 a.m.	Toileting and handwashing
10.20 a.m.	Snack
10.40 a.m.	Clean-up from snack
10.45 a.m.	Outdoor play
11.30 a.m.	Toileting and washing, tidying up
11.40 a.m.	Group meeting for story or music
12.10 p.m.	Table games and quiet activities (puzzles, manipulative toys, cognitive games, small group lessons)
12.40 p.m.	Clean-up (put away materials and

* Mialaret, C., op. cit., p. 42

games; straighten room)

12.45 p.m.	Final meeting to sum up the day
12.55 p.m.	Getting ready to go home
1.00 p.m.	Departure of children" *

*The replies to the survey questionnaire from some of the countries showed that they also "have institutions which are open six hours a day and more; in these cases, part of the time is devoted to activities which are not educational in the strict sense of the term. (arrival, washing, meals)".***

A typical full day schedule with perhaps reflects more the needs of the working parents could be something like this:

"8.00 a.m.	Arrival of children (reception and health inspection)
8.30 a.m.	Group meeting for prayers, poems, songs, rhythms, or dances
8 45 a.m.	Activity period (creative activities and readiness activities)
9.45 a.m.	Clean-up and straightening of room
10.00 a.m.	Toileting and washing
10.10 a.m.	Light snack
10.30 a.m.	Outdoor play
11.15 a.m.	Group meeting for discussion and story
11.45 a.m.	Toileting and washing
12 noon	Lunch
12.30 p.m.	Clean-up
12.45 p.m.	Rest or sleep (nap-time)
2.30 p.m.	Toileting and washing
2.45 p.m.	Quiet activities: manipulative toys, table games
3.30 p.m.	Clean-up (put away games and toys)

* Kolumbus, E.S., op. cit., p. 155
** Mialaret, G., op. cit., p. 42

3.40 p.m.	Washing hands
3.50 p.m.	Snack
4.10 p.m.	Outdoor play
5.00 p.m.	Toileting and washing
5.10 p.m.	Group meeting for discussion, story, flannelgraph or puppet show, finger plays, songs
5.40 p.m.	Preparing to go home
6.00 p.m.	Departure of children" [4]

Of course there should never be any rigidity about time-tabling in a pre-school programme. If the primary consideration in a programme is to make it responsive to the learning needs of the children with all their varying home background and individual differences, the need for adaptability and flexibility on the part of the teacher can hardly be overstressed.

B. ARGUMENTS FOR AND AGAINST ROUTINIZATION AND OPENNESS

Some educators feel so strongly about flexibility and the principle of individualization of instruction that according to them a good pre-school time-table must ever remain ready to change according to the changing needs of the child and must never be imposed from above.

> "The Kindergartener who believes that the child learns best when he is given the chance to choose ways and means from a wide range of possibilities will not demand that the child adjust to a daily routine imposed upon him by the adult. The child's activity is the basis for organizing his day. In our approach however we do ensure a permanent framework - some-

[4] Kolombus, E.S., op. cit., p. 156

thing needed by the child to help him understand routine and to adjust to regular times for getting up, eating and resting. This permanent framework allows the child to exploit his day in the best possible way.

"The child's day at kindergarten begins with free play in the yard and inside until all the children are ready for the morning meeting with the kindergartener.

"The meeting is a gathering of all the children during the morning and at midday.

"The aim of this meeting is not to teach the children. The content is based principally on the activity of the children: Sound and rhythm, discussion, play-songs, stories. There is no need for long meetings but they should be as long as the children can manage. We have found that the most desirable length is ten-twenty minutes. After the morning meeting the children disperse for free activity -an opportunity for children to choose according to their interests. When a child does anything because he is interested in it - he relates to it much more significantly, that is, he asks questions and tries to find answers. Free activity with interest and choice develops the feeling of independence and responsibility in the child - he has to carry out the activity he has chosen.

"The children are busy with free activity for most of the morning. During the activity the kindergartener meets with the children individually or in groups. She talks with them, asks questions, tells stories and listens to what the children have to say.

"In the time devoted to free activity there is a flow from activity to activity since the phy-

sical conditions of the kindergarten allow for maximum independence.

"The kindergartener's role is to supply the equipment and to be always prepared with materials and the organization of the environment. But her role does not end here. She has to accompany the child in searching. The role of the kindergartener is to initiate new possibilities which will allow examination, discovery, the posing of new questions and getting answers.

There is no doubt that the children need a time framework. The two fixed in meetings - one in the morning and one at noon - act as fixture points. But within the framework of free activity the children should be allowed to be active without interference. Only the regulations of the place, which cannot be changed, can halt their activity. An example of such a regulation would be: "Now we're going to put things away because soon we're going to have lunch". The activity of the children, however, will not be cut off because of an activity the kindergartener has planned. We have found that there is no need for a communal morning snack which interrupts the children's activity. Morning tea is set out in a permanent place and the children go there in small groups and eat at different times. This meal takes place from 9.30 - 10. .

"There are those who claim that such long hours of activity tire the child and that one should provide relief, breaks and free play in the yard. We have learned, through observation of the children, that the children have no need of breaks we decide for them. Every child has his own internal control where it concerns increased

activity which interchanges with relief. It is important for us to be attentive to the internal rhythm of the child so that we can respect his need to rest, dream, to passively look at others or to repeat some simple activity over and over. It is important for we adults to believe in the child's ability to be active and in his need to rest." *

To the above inspired exposition of the child-centred pre-school curriculum and its underlying principles, two caveats must be added however.

*First, how much individual attention in practical terms can a pre-school teacher, however competent or gifted, be expected to give to a group of 30 to 35 children?** The query carries its own answer. If the wide prevalence of rote-learning methods in pre-school institutions throughout the world is any indication, one can understand how really serious the problem is. Happily enough in some countries - mostly in the developed category as yet - the staffing patterns of pre-school institutions are beginning to change in the direction of lower and more favourable pupil-teacher ratios through increased utilization of part-time teachers, teacher-aides and volunteers including parents. While some of the additional hands tend to be assigned custodial and clerical responsibilities, others are encouraged to participate in the actual teaching function.*

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* *The Active Child - the Learning Child - A Handbook for Kindergartens, op. cit., p. 42 - 44*

** The 1974 survey showed "that although few countries have less than 20 pupils per class (6 replies), many have between 20 and 50 (approximately 50) and a few have over 50 (4 replies). Mialaret, G., op. cit., p. 41

*Second, it is important to understand that great as the child's need for freedom and new experiences is, so is the reality of his need for some order and routinization in the learning environment. It is only through the discipline of a meaningful daily routine, however flexible, involving rhythms of rest and wakefulness, snack and clean-up, quiet indoor activities and free outdoor play, etc., that he will acquire an understanding of what comes next and what to expect and be able to prepare himself for meeting the pressures and challenges of the outside world. It is important, therefore, that there be "a specific time for arrival, a time for meeting as a group, a time for working, for toileting, for eating. There must of course be a time for going home. The daily repetition of such "landmarks" provides the children with a sense of security and continuity."**

C. COMPROMISE BETWEEN ROUTINIZATION AND OPENNESS

The complementarity of the principles of broad routinization and openness is reflected in the following daily time-table suggested for a Balwadi in India. The author is quick to warn, however, that while a Balwadi teacher should be free to make changes according to the local circumstances of the situation, the tendency to change, when there is no good reason to justify it, must be discouraged.

Unnecessary changes cause confusion in the minds of young children and they get upset easily, not knowing what to expect next. Further, insofar as the time for free conversation (also called chit chat) with children is concerned, it must never be scrapped or replaced by something else unless the circumstances are exceptional.

** Kolombus, E.S., op. cit., p 11

"(1) Cleanliness of the hut and court yard - cleaning with a broom, sprinkling a mixture of cowdung and mud first and then decorating with Rangoli.

(2) Personal cleanliness - To plait hair, care of of nails, to wash and clean hands and feet, to keep their clothes properly, to stitch buttons, if there are no buttons; to stitch clothers which are ripped and if necessary to put on a patch. (Every Saturday there should be an inspection of of all these, and the inspection report kept on record.)

(3) Prayers (e.g. Oh! Goddess Sharda(i) and some devotional songs (Vithucha, Vithucha).(ii)

(4) Collective or Group Activity - This may be divided into two sections: (a) 'Music' - This may include nursery rhymes ('Lahan Mazi', 'Pala re pala', 'Jameen Khanu ya' etc.),(iii) action songs ('Themba Themba, Thamb Thamb, Chandoba Chandoba),(iv) songs to be sung while going round and round in a circle ('Pher Songs'); (b) a story (such as 'Pal re Bhopalya', 'Kolhoba Kolhoba')(v) free conversation (chit-chat) with children, acquaintance with various objects (such as cereals and pulses) dramatization (e.g. Undarachi Topi)(vi) etc. These two programmes can be taken on alternate days, i.e. if music is taken on Wednesday, story etc. should be taken on Thursday.

(i) The Goddess of learning
(ii) A Marathi devotional song
(iii) Names of Marathi nursery rhymes
(iv) A Marathi action song for children
(v) Names of Marathi stories
(vi) A short Marathi children's play

(5) Individual activity programmes - there are activity programmes provided for hand work, sensory experiences and sense-training, developing language ability, maths ability etc. All these development programmes can be easily planned through games on the different equipment and aids.

(6) Eating snacks and keeping things in their proper place.

(7) Gardening

(8) Games." *

*On the basis of his analysis of the country replies to determine what an average day is like in a pre-school educational establishment, Mialaret suggests that the day could appropriately end "with a story told by the teacher, with all the children sitting round her. This return to an atmosphere of calm will prepare the children to go home and return happily to their mothers and families." ***

Balwadi by Vagh

** Mialaret, G., op. cit., p. 43

PART TWO: METHODOLOGICAL CONSIDERATIONS RELEVANT TO ECCE INTERVENTIONS

I CONCEPTUAL ASPECTS OF LEARNING

The effectiveness of the pre-school interventions is essentially a function, among other things, of the methodological characteristics of the teacher or learning mediator's personal style. The style itself is a function, inter alia, of the qualities and dominant characteristics of his personality.

Does the teacher love children and enjoy working with them? Is he patient, warm and outgoing? Does he have a strong physical stamina and good understanding of human development? How well does he communicate? What is his perception of the learning needs and characteristics of young children? What is his perception of his own role as a teacher or a facilitator? What kind of an organizational climate inside the classroom does he believe in fostering? What techniques of reward and punishment does he employ to reinforce learning behaviour among children? Does he find the use of audio-visual aids rewarding? What are his views of the use of television as an educational medium for the very young? How much importance does he attach to parental cooperation in developing pre-school activities and how does he go about securing it? Does he believe in maintaining proper pupil records of their physical, intellectual, social and emotional development, or does he think that a pre-school programme can for all practical purposes be run as a day-to-day operation?

This chapter is an attempt briefly to address some of these and related aspects of pre-school curriculum. It opens with a short comment on certain conceptual aspects of the young child's learning behaviour.

When one looks carefully at the child -and acitivity- centred methods currently in use or advocated for use in pre-school programmes, the world over, one has little difficulty in recognizing that their origins go back to the teaching and formulations, among others of Comenius, Rousseau, Pestalozzi, Froebel, Robert Owen, Decroly, Maria Montessori and John Dewey.

Although some of the general principles first enunciated by these pioneers continue to apply and be in use, the pre-school methodology and instructional teachings have proliferated and diversified a great deal thanks to recent research in a number of disciplines, notably bio-medicine, developmental psychology, animal and human learning, psycho-linguistics and social anthropology. Every alert pre-school teacher today, therefore, has the responsibility to work individually and, after examining the leading models, work out for himself a methodology which is in line with the main principles of pre-school education and is best suited to the circumstances of his particular situation.

A reference to the theory of child learning and development put forward by Robert R. Sears* was made in Digest III (p. 10).

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* "Like Piaget he makes use of developmental phases rather than exact age norms, and suggests that in the continuum of development, whatever the individual does, thinks or feels in any area of his life at any given point in time is "intrinsically linked" to the person's image of himself,

...

A short appraisal of the contributions of Piaget who has made the most systematic study yet of children's thinking appeared on p. 19 of that Digest. It is also important to recognize the contributions of two other schools of psychology that have contributed significantly to our understanding of children's learning and behaviour:

(1) The BEHAVIOURISTS and

(2) the (rival) group of psychologists known as "PHENOMENOLOGISTS".

A. BEHAVIOURISM

"Behaviourist psychology remains an important influence in early childhood education, with the theories of Skinner supplanting the earlier ones of Thorndike as a basis for developing early childhood educational methodology. Skinner is concerned with the shaping of behaviour through operant conditioning, which is designed to increase the rate at which certain normal responses will occur. This is done by reinforcing the responses with a minimum of delay. Responses that are strengthened by reinforcement can also be extinguished by a failure to be reinforced. *

"Behavioural programs are all characterized by similar methods of instruction. Learning is broken up into small discrete steps and is carefully sequenced. Heavy use is made of associative learning, with discrimination and categorization learned as a result of association. Each child is moved along a linear continuum at a rate that will insure success. **

... his family, and his key reference groups. Each individual is inwardly dealing with his own inner experiences, his primary environment, and his secondary environment. He can only relate to these three spheres in the way they are integrated by him, regardless of the image others may hold of him."

* Spodek, B., op. cit., p. 22

** Ibid., p. 69

The increasing popularity of 'Behaviour Analysis' as a technique of curricular reform and improved learning behaviour owes much to its underlying behaviouristic assumptions. The materials to be used in applying this technique say in the teaching of the core subjects of reading, mathematics and handwriting are expected to conform to the following 5 conditions:

> *"1. describe the behaviour the child will be capable of at the end of the sequence,*
>
> *2. require frequent responding by the child.*
>
> *3. contain clear criteria for a "correct" response,*
>
> *4. allow for individual rates of progress, and*
>
> *5. provide for periodic testing of achievement gains."* *

Behaviour Analysis has also a very interesting approach to child discipline.

> "Behaviour Analysis uses positive reinforcement to build improved student behaviour and seeks to eliminate all coercive or negative control procedures. Verbal or physical coercion or threats are not used, but the absence of these techniques should not be confused with permissiveness. Misbehaviour cannot be tolerated in a classroom for it may accidentally meet with reinforcement that will strengthen (teach) it.

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* Bushell, Jr., Don, *The Behaviour Analysis Classroom*, in Spodek, B., op. cit., p. 167

"Rather than nagging, scolding, or threatening punishment for inattention, the Behaviour Analysis teacher first provides heavy reinforcement to another child who is attending to the assignment. Then, when the inattentive child starts to work, he is immediately praised by the teacher. The general strategy is to ignore inappropriate behaviour while providing heavy and frequent reinforcement for desirable behaviour.

"Behaviour which is potentially damaging or dangerous cannot be ignored. The procedure used in such circumstances is technically known as "Time-Out". Time-Out is accomplished without emotion, lectures, or scolding, but is consistently the immediate consequence of dangerous behaviour. The child is immediately told what rule he has broken and then seated in a chair away from the other children. He remains there with a kitchen timer set for three minutes. As soon as the bell rings, the child returns to the group to be rewarded for his appropriate behaviours. His penalty is that for three minutes there has been no opportunity to engage in behaviour that results in token reinforcement.

"These are only two examples of procedures which correct unacceptable classroom behaviour without the unwanted side effects which are part of harsh, coercive punishment". *
Those inspired by the behaviouristic approach to learning have been emphatic on the development or formulation of behavioural objectives.

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* Bushell, Jr., Don, *The Behaviour Analysis Classroom*, in Spodek, B., op. cit., p. 169

"Actually there is nothing psychological about the use of behavioural objectives, nor are objectives more profound because they are stated in behavioural terms. The translation of goals of the curriculum into behavioural objectives, however, allows for an easy and often misleading evaluation of achievement.

"Psychological processes are not directly observable; they must be inferred. Behaviours are observable. Psychologists often forget that the meanings of these behaviours must still be inferred. A psychologist may identify as a ligitimate goal of nursery or kindergarten education the ability to attend to auditory signals. This might be translated into the following criteria behaviour: "The ability to sit still for 10 minutes and listen to a story as part of a group." Whether or not a child is actually gaining meaning from the auditory environment is not directly observable. The relationship between sitting still and listening (which is certainly not a 1:1 relationship) has led the psychologist to list as his goal a behaviour which might better represent conformity than attention.

"Psychological theory focusing on behaviour and behaviour modification has determined the structure of a number of curricula in early childhood education. While short-term change is easily observed and evaluated, there are seldom any attempts to study long-term effects on these curricula. In the final analysis such programs may be based as much on ultimate faith as are any of the more traditional programs. The description of a program in psychological terminology and the great emphasis on the evaluation of effectiveness without analyzing ultimate goals may, in the long run, obscure the ultimate consequences of these programs."*

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* Spodek, B., op. cit., p. 86

B. PHENOMENOLOGICAL PSYCHOLOGY

A number of psychologists, known as phenomenological psychologists, reject behaviourism as too mechanistic and simplistic a view of complex human processes including learning. Snygg and Combs, for instance, suggest

> "that a person's behaviour is a function of his understanding of a situation. Learning, for both children and adults, is a process of change in the phenomenological field. The meanings of situation and of behaviour become more important than their manifestations. Learning, therefore, requires the development of organized frameworks that give meaning to situations, a point of view not incompatible with Piaget's theory.
> "From the point of view of the phenomenological psychologist, an early childhood program should concern itself with helping children change their phenomenological fields, rather than with directly changing their behaviour.

The starting point of the program would be the individual child's personal knowledge. Children would be provided with experiences that would increase the information they had or that would be different from their present ways of viewing and understanding the world. By providing the child with an environment that does not quite match his level of knowing, the teacher helps him reintegrate his knowledge in more mature ways. While this form of teaching might be done on an individual basis, the group process could also be used as the vehicle of learning to help children move from idiosyncratic modes of learning to more socially based modes." [1]

[1] Ibid., p 23

And there are other models, somewhat closer to the phenomenologist's way of thinking that question behaviourism by pointing out that the most significant factors determining the quality and rate of a child's learning are the social climate of his environment and the role of the teacher. 'Open educators', for instance, "view the school as a place to help children learn how to learn, to extend their intellectual and emotional resources, and learn to use these resources in making decisions, organizing experiences, and utilizing knowledge. Schooling at all levels should be justifiable as an experience in its own right, not simply as preparation for later tasks.

> "The child is perceived in open education as having the right to make important decisions regarding his own educational experience. He is capable of making intelligent decisions about significant areas of learning, given a degree of adult support. The child's interests and curiosity provide the basis for learning in school.
>
> "Knowledge is viewed as a personal synthesis of one's own experience. Different children may create different kinds of knowledge as the result of the same school experience. Similarly goals may be arrived at in different ways by different children who learn in their own style and at their own rate. Because of the idiosyncratic approaches to learning that children have, short-term evaluation of learning is often misleading. More legitimate evaluation of development can be made over longer periods of time.

> *"Education should take place in an environment that communicates trust, openness, and mutual relationships among children and adults. Such an accepting and warm environment supports learning. Each child in*

*school has the right to be treated with kindness, courtesy, and respect. **

*"No one method of instruction is used in an open education approach. Rather, the teacher will suggest a range of methods based upon her knowledge of the children's abilities and interests. In general, an active mode of learning characterizes these classes and there is a high degree of support for what might be considered "discovery learning" rather than "telling", although lectures might be given on occasion. The children will be involved in inductive forms of learning during much of the time."***

The teacher"acts as a guide for the children's learning, never abrogating responsibility for it, but allowing the children to assume responsibility for it as well. She demonstrates her trust of the children and her concern for them. She will allow her feelings, as well as the feelings of the children to be voiced in the classroom. She respects the children with whom she works, values their abilities and their products, and continually strives to create an air of warmth and support in the classroom.

"The teacher evaluates the work of the children, setting standards based upon the individual child's abilities rather than on grade level norms. She develops activities that will appeal to the children with whom she works based upon her diagnosis of their needs. She will keep records of the children's work, often through both direct observation and recording of activities, and the collection of pupil product." *** Perhaps one of the more encouraging and fruitful views of the learning problems of the young child is that offered by the designers of the 'RESPONSIVE MODEL PROGRAMS'.

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* Spodek, B , op. cit., p. 72
** Ibid., p. 73
*** Ibid., p. 74

"The central idea of our Responsive Model programme is that a school environment should be designed to respond to the learner. The activities within the environment are autotelic; that is, they are self-rewarding and do not depend upon rewards or punishments unrelated to the activity.

> *"This learning environment satisfies the following conditions:*
> *a. It permits the learner to explore freely;*
> *b. It informs the learner immediately about the consequences of his actions;*
> *c. It is self-paced, with events occurring at a rate determined by the learner;*
> *d. It permits the learner to make full use of his capacity for discovering relations of various kinds; and,*
> *e. Its structure is such that the learner is likely to make a series of interconnected discoveries about the physical, cultural, or social world.*

"The programme is not based on any single theory of learning since there appears to be no single theory that adequately accounts for all the ways children learn. The programme does, however, draw from many different theories. Much of the programme is based on the assumption that there is a relation-ship between maturation and the learning of specific skills or concepts is not altogether clear.

"While we develop learning sequences, we do not assume that every child must follow that sequence. In many instances we do not claim to know the learning of a particular behaviour contributes to the future learning ability or achievement of a child. This has sometimes been described as a "sandpile theory of learning"; that is, we know that it takes a tremendous number of grains of sand to support more sand. But we are not all certain which grain of sand is necessary to support the next one. And, as the analogy implies, we are not certain that any particular grain is necessary - others could be substituted and still support the sandpile." *

C. DEVELOPING THE CHILD'S SELF-CONCEPT

Whatever the particular methods employed in a pre-school programme, one of their primary functions must always be:

- to develop the child's self-confidence,
- to foster his motivation for achievement, and
- to develop his capacity for autonomous functioning.

The curriculum must be so designed that with all its practical limitations, whatever those might be in a given situation, it does not fail t give the young learner continuing experience of success, and to establish feelings of self-esteem and pride in his own worth and identity.

The fulfilment of this condition is vital to sustain the child's motivation at a constantly high level without which he will not have sufficient interest to explore his physical and social environment or to learn from it.

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* Nimnicht, Glen, *Overview of Responsive Model Program*, in Spodek, B., op. cit., p. 200.

II THE PRE-SCHOOL TEACHER

A. PERSONALITY CHARACTERISTICS OF THE TEACHER

While psychological and behavioural research may not have succeeded so far in establishing clear relationships between the personal characteristics* of a pre-school teacher and the quality of his teaching, commonsense and experience are strong in suggesting that a good early childhood education involves certain important personality traits. A committee on nursery and infant education in Barbados has made an attempt to identify some of these attributes:

> "...love and respect for children, patience and kindness, sympathy and its counterpart empathy, a sense of humour, a sense of reponsibility, consistency and enthusiasm. She should be adaptable, resourceful and have a knowledge of Child Development. This knowledge will enable her to distinguish and understand varying behavioural patterns. Last, but not least, the teacher should have the indispensable assets of physical and emotional strength." **

And above all a teacher must have boundless faith in the essential educability of the child.

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* While the statement of fine personal characteristics as requirements for early childhood educators is laudatory, there is no evidence that persons possessing these qualities are any better teachers than those in whom the qualities are absent." Spodek, B. in *Staff Requirements in Early Childhood Education*. in *Early Childhood Education* - The Seventh-first Yearbook of the National Society for the Study of Education, USA, 1972, p. 346

** *Infant and Nursery Curriculum*, prepared by the Committee ...

"Teachers who believe children *can*, will try to teach them. Teachers who believe children are unable, give up trying or spend their days on a treadmill, hopelessly making motions they never expect will mature. The beliefs we hold about people can serve as prison walls limiting us at every turn. They can also set us free from shackles to confront great new possibilities never dreamed of before. No beliefs will be more important to education than those we hold about the nature of Man and the limits of his potentials. Whenev[illegible] ideas about human capacities ch[illegible] goals of teaching must change.[illegible]

Why is it particularly important for pre-school teachers to have all these qualities? For one good answer we look to the social learning scientists. Their researches reveal that among infants, a considerable amount of learning and personality formation takes place through the process of 'modeling'.

*While modeling involves 'watching others', the process is not to be confused with imitation. The distinction is important because children's acquired response pattern will often manifest symbolic equivalents of the behaviour they have been observing, something that cannot be explained by imitation alone.***

B. TEACHER ROLES

A popular image of the teacher is of someone standing in fornt of a class and delivering a lecture extempore or with a book in one hand, and a chalk or a rod in the other. This caricature overlooks the multi-

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... on Nursery and Infant Education for the National Curriculum Development Council, Barbados, p 4.

* *Perceiving, Behaving, Becoming*, The 1962 Yearbook of the Association for Supervision and Curriculum Development, Washington, D.C., National Education Association, p. 1

** ...

plicity of roles a school teacher, particularly a pre-school teacher, has to play in the day to day performance of his or her educational responsibilities.

The more important of these roles would easily include:

- *Organizer of the environment*
- *caregiver*
- *model for speech, manners and behaviour*
- *communicator*
- *custodian and seeker of knowledge and learning*
- *diagnostician*
- *bridgebuilder (between school and community)*

Apparently the roles overlap a great deal and their significance will vary considerably from one programme to another *; but the two major conditions determining their effectiveness are (1) the teacher's attitude towards children; and (2) the degree or depth of his involvement in work. What precisely do these two conditions imply?

(i) Teacher's Attitude Towards Children

Most teachers view outward and aggressive behaviour among children as something more serious than passivity and withdrawal and are often inclined to attribute it to some defect in the personality make-up of the child. This is not only contrary to the opinion of psychiatrists or clinical psychologists, but also repugnant to the observation, easily made, that a child who is guilty of 'anti-social' behaviour and is not doing well in one class has no behavioural problems and may be doing quite well in the class of another teacher. The problem, it seems, is really in the attitude of the teacher who has not been able to project for himself the image of "an accepting non-demanding person". Here is a wise word for him:

...In some ways the term 'modeling' as used here is akin to the psychological process of 'identification'.

* cf. "Different models of early childhood education may require different kinds of teaching methodology. Katz ...

"Show the children that they are important to you. Every child needs to feel that his teacher cares about him. Every child needs to know that he is somebody special. Find time every day to speak to each child and to call him by name. A sentence or two just for him will help to establish a warm relationship between you. ("Good morning, Boni. We missed you yesterday. Were you ill?" "What lovely shoes you're wearing, Dana. Are they comfortable?") As much as possible, too, bend or kneel down to the child's eye level when you speak with him, if this does not conflict with the norms of your culture.

"All Children need to feel successful. It is your job to provide them with the tools and direction. Some children may need special activities or help in order to be constructive. A child who is shy or hesitant will need to be encouraged. A child who is too boisterous and rough will need to be calmed down. When a child seems unusually apathetic or unusually aggressive, it may be that he is not being sufficiently challenged. Or it

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... has identified three role models used in teaching children in pre-schools. In the *maternal model* the teacher places emphasis on keeping children safe comfortable, and happy. In the *therapeutic model*, the teacher emphasizes providing children with opportunities to express and deal with feelings and tensions. The teacher in the *instructional model* emphasizes the deliberate transmission of content. These models are ideal types and may not exist in pure form.
To the above three models might be added a fourth teaching model, the *facilitator model*. The teacher in the facilitator model concerns himself with creating a learning environment and engineering the child's encounters with significant learning experiences." Spodek, B., Chapter XV - *Staff Requirements in Early Childhood Education* in The Seventy-first Yearbook of the National Society for the Study of Education, op. cit., p 347.

may be that the task is too difficult for him and he is frustrated. Help children to know success by giving them tasks that are are within the range of their abilities." *

(ii) Teacher Involvement

The second important correlate of a teacher's success is his programme involvement. What does that mean?

> "Involvement is, first and foremost, presence The active presence of an adult is needed by the child to allow him to act, create and learn.
>
> "Involvement is, observation . Observation allows the kindergartener to see what the children are doing, how they are doing it and why.
>
> "Involvement is attention. Through paying attention to what the children say, the kindergartener** learns about the level of the children's understanding and what interests them.
>
> "Involvement is scrutiny . Through scrutiny of the children's activity the kindergartner gets information from the children themselves about their activity, their behaviour, their choices and their decisions.
>
> "Involvement is encouragement, comments and criticism. The kindergartener relates to the efforts of the child during activity and this contains encouragement and criticism. Not all activity is solely pleasure. Like the adult the child also feels lack of progress, doubt and frustration. He needs reaction, encouragement and criticism.

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* Kolumbus, E.S., op. cit., p. 14

** The terms 'kindergartener' and 'Kindergarten' in the quotation may be taken to stand in the present context for pre-school institution and pre-school teacher respectively.

"Involvement is questioning, verbal expression, and formulation. The right question leads the child to new experimentation, to discovery and inquiry, to problem solving, to understanding the experience. Verbal expression and the formulation which accompany the child's activity act as bridges between ideas and facts - between deeds and concepts.

"Involvement is relating to process and not only to the final product. We do not emphasize the child's quantitative achievement. It is his effort, his ability and concentration, his discovery and mutual assistance which is important.

"Involvement is the establishment of rules and adherence to them. Clear rules allow the child to act easily and independently. The framework of rules serves the many possibilities availabe to the child. Of course, together with adherence to the rules agreed by the children, the possibility for flexibility exists. Every rule can be changed according to educational needs.

"Involvement is constant concern for the organization of the kindergarten as a place which stimulates curiosity and activates the child.

"Involvement is change in environmental organization in accordance with the interest of the child and his activity." *

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* *The Active Child - The Learning Child - A Handbook for Kindergartens*, op. cit., p. 50

C. AS ORGANISER OF THE ENVIRONMENT

And now to offer a few general comments on the different teacher roles. The physical environment (indoor and outdoor) must suit the physical and psychological needs of young children. It must be an attractive place with a pleasant atmosphere which invites the child to activity. The arrangement of the space should be such as facilitates interaction between the child and his environment, between child and his peers, and between the child and his teacher (or teachers).

> "Three year olds like to play alone, even if it is side by side in a kind of parallel play. As the children grow older, they begin to relate to each other and to work and play in small groups of two or more. Sometimes the entire class meets together as one large group, and sometimes the child feels the need to be alone in a tiny, cosy space. For each of these instances, the appropriate setting must be arranged."*

It is important to provide some items with which the children can identify. It will make the place more reassuring and comfortable for them "if at the outset they see items with which they are familiar at home.

> For example, in the home corner you might provide a pot for cooking, a sieve or other items that the children know: perhaps a pillow and a straw mat for resting their dolls, or themselves. For rural children, you might make farm animals from maize cobs or straw for the children to use in their play. The items you choose will depend upon the environment in which your kindergarten exists."**

> "Each child should have a place for his own personal belongings, whether it be a furniture drawer or cubby, a large tin can or a cardboard box, a shelf against the wall or a sack or bag on the back of the chair. Many small children

* Kolombus, E.S., op. cit., p. 18
** Ibid., p. 11

have few, if any, belongings of their own at home. Yet these early years are the ones in which a child begins to develop concepts of *self and identity*. It is important for each child to have a place of his own, even if it is only a sack or a can, in which to keep his private treasures and accomplishments - a picture that he coloured, a feather, a rock. He needs a place which has only his name on it to give the feeling that he, too, is important." *

As children become familiar with the order and events of the daily schedule, their sense of security grows. It is a good strategy to "always have something prepared for the children to do, otherwise they will become restless and bored. The preparation, however, should be done in advance. When you are with the children, your concentration and attention should be focussed upon them and not on setting things up; get your materials and equipment ready for use before class time." **

D. CLASS MANAGEMENT AND DISCIPLINE

As suggested by Goode and Brophy, four of the more common types of classroom situations are as follows:

"(i) The classroom is in continual chaos and uproar. The teacher spends much of his day trying to establish or re-establish control but never succeeds for long.

(ii) The class is noisy but the atmosphere tends to be positive... teacher goes to great pains to make school fun for the students,

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* Kolumbus, E.s., op. cit., p. 20

** Ibid., p. 15

introducing many games. There are still problems.

(iii) The class is quiet and well disciplined. This teacher establishes many rules... and sees that the rules are obeyed.

(iv) This class seems to run by itself. The teacher spends most of his time teaching; students interact with one another..; (noises) tend to be under control..; observer... senses a certain warmth in the atmosphere and goes away positively impressed." *

The main direction in which classroom management to be more effective and purposeful should move is from position (i) of the chaotic and uproarious class to positive (iv) in which in the main class runs itself and 'the teacher spends most of his time teaching".

Some of the measures that facilitate such a change will include:

- *Establishing a workable daily routine;*
- *Adequate preparation (by the teacher) for the day's work;*
- *Giving challenging assignments to individual children and small 'interest and ability' groups;*
- *Providing experiences of success to each and every child;*
- *Rational discussion of behaviour problems with children with praise for good behaviour.*

No matter how carefully the environment is arranged, the pre-school child will now and then present the teacher with behavioural problems.

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* Goode, Thomas L. and Brophy, J.E. *Looking in classrooms*. New York: Harper and Row, 1973, as mentioned in *Training Teacher Trainers and Para-Professional Teachers* by Grant, Dr.D.R.B., Bernard van Leer Foundation, 1982, p. 38

"As a child is learning controls and explores his limits, he sometimes may step over the boundary into misbehaviour. He may behave in an unacceptable fashion because he is frustrated. He may do so because this is his first experience with many boys and girls, and he has not yet learned to get along with others. A child may misbehave or get into mischief for many reasons.

"When a child misbehaves, the wise thing is to condemn his deed, not the child. Try to reprimand in a way that he can learn from his mistakes. For example: Nadia was building a castle from blocks. Narni approached with a block in her hand and threw it, causing the structure to fall apart. You might in this case say, "Blocks are for building, not for throwing, Narni. Please apologise to Nadia and help her rebuild her castle." This approach is much preferable to: "You bad girl.

"Sometimes disruptions are unintentional: Rina was carrying a pan of water in the home corner for washing the doll's clothes. She filled the pan to the top and was in such a rush to begin that she did not notice Ofra walking out of the home corner. The two collided and most of the water splashed upon both girls and on the floor. A teacher could help Rina prevent such an incident from happening in the future by remarking, "Rina, you have filled the pan too full. What could you do next time so that the water will not spill?" *

The important principle is: it is not enough to reprimand a child; the teacher's function is to guide him towards acceptable forms of behaviour. The children are never lacking in eagerness to obey rules if they understand the reasoning behind them.

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* Kolombus, E.S., op. cit., p. 12

A good rule for the teacher is never to embarrass a child by scolding him in front of his friends; it is much better to speak with him privately when the other children are not there.

The importance of guiding the children through positive statements, telling them what to do, instead of what not to do can hardly be exaggerated.

*Here are some examples suggested by Kolombus**

THIS	NOT THIS
"Let's listen to find out what happens next in the story."	"Don't talk now. We're reading a story."
"We shall all go out to play when we finish our snacks."	"You can't go out to play now. It isn't time."
"Use a separate brush for each colour of paint. The colours will stay brighter longer that way."	"Don't put your brush into all the colours of paint. You'll muddy the colours."

E. AS CARE-GIVER

The importance of reorganising and meeting among others the nutritional and health needs of the child was explained in Digests I** and II. A pre-school teacher must have familiarity with the major health problems of children in their particular background and culture and must have the means and knowledge to take suitable action to meet them. It is appropriate to remind ourselves once again that Rachel McMillan, the founder of the first nursery school in England

* Spodek, B., op. cit., p. 59

** *The Active Child - the Learning Child - A Handbook for Kindergartens*, op. cit., p. 60

"viewed teaching in the nursery school as a role that combined the care and education of children. The practitioner was a "nurse-teacher". *

F. AS MODEL FOR SPEECH, MANNERS AND BEHAVIOUR AND AS COMMUNICATOR

Most of young children's learning is indirect in that they learn a lot from the teacher's example.

The teacher is under close observation all the time; his speech, listening habits, manners (and mannerisms), style of dress, fairness (or otherwise) in dealing with children and in rewarding or disciplining them etc. will all leave a permanent imprint on the young minds, and he can hardly be too careful about these matters.

That to many child he will be in loco parentis underlines the centrality of this role.

Whether a teacher is narrating a story, explaining a point, answering a question or guiding a discussion, he is essentially performing the role of a communicator.

*Basic to communication and "verbal intervention is activity, experimentation and enquiry. The verbal expression comes only to sum up the experimentation of the children. Rich verbal involvement exists in an active environment where interesting and varied activity is accompanied by verbal expression - formulation, comparison, summary, questioning, prediction. Intervention which is totally instructive is poor.***

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* Spodek, B., op. cit., p. 59

** *The Active Child - the Learning Child - A Handbook for Kindergartens*, op. cit., p. 60

"The most desirable type of discussion is not a jumble of talk where no-one listens to anyone else. The kindergartener's task is to listen to the children's discussion, to develop some of the ideas that crop up, to follow the train of thought, to summarize. She encourages as many children as possible to take part in the discussion. Individual discussions with children also have an important role. The kindergartener has to devote time to personal discussions with individual children. This type of discussion can take place during the child's activity period and its content will be connected with this activity. She also has to find the opportunity to talk about other things with the child such as what is happening at home, a recent birthday, a new baby at home or Daddy on reserve duty.

"The kindergartener encourages the child to predict things and foretell results. 'Try to think what will happen if...'

"The kindergartener encourages association: "What does this remind you of?", "Where have we seen something like this before?".

"Sometimes the teacher should ask open questions. Thus she helps the child to choose between several possibilities and to evaluate the results of their choices. Some examples of open questions are: "What do you think happened here?", "How can we do it differently?", "Can you think of another solution?", "What will happen if...?"."*

The teacher's role as a communicator is particularly important for children coming from a disadvantaged background.**

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* *The Active Child - the Learning Child - A Handbook for Kindergartens*, op. cit., p. 61

** For a brief comment on the cognitive development of the child including language and general intelligence, see Digest III _ Zero through Six: Learning and Growing; What we Know of the Very Young Child, p. 18

Two important types of developmental deficits from which such children suffer are:

"(1) Deficiencies in verbal-conceptual functioning:
Paucity of names for everyday objects; restricted use of qualifying terms; incorrect pronunciation and grammatical usage; immaturity of thought processes that go beyond concrete, immediate experience and depend on language for expression; poor discrimination; a paucity of information.

(2) Deficiencies in how to connect with the world of things and people:
*Difficulty in listening, attending, focusing, and sustaining interest or contact; a motoric, staccato, disordered release of energy; difficulty in fitting into a situation that is ordered with respect to time and space; immature ways of dealing with impulses and feelings such as anger, frustration, and denial; expectation that the adult will be distant, denying, punishing; vagueness of self-concept; and so forth."**

The deficits result from multiple causes:

"(1) the absence of models of spoken language that in correct in structure and elaborate in shadings of meaning;
(2) an environment in which communication has been limited to the minimum essentials, resulting in a lack of experience in conveying meaning, observation, and feeling and in having one's meaning understood and received with interest and concern;

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* Biber, Barbara, *Goals and Methods in a Pre-school Program for Disadvantaged Children*, in Spodek, B., op. cit., p. 250

(3) little experience in exploring the physical world in an atmosphere that encourages trying out what can be done with things; and

(4) lack of "as if" experience - playing "make believe" or reproducing reality in one's own terms with dolls, blocks, or trains - the basic symbolic experience of childhood that seems to be a prerequisite for subsequent symbolizing with abstract forms." *

One right way to help the child overcome his deficits will include a two-pronged attack on the problem:

"(1) to advance the child's ability to use functionally and to be able to systematize experience through mastery of conceptual cognitive processes; and

(2) simultaneously to help him develop a solid sense of self and an internalized code of behaviour, to build ego-strength in terms of becoming an effective, non-predatory person, capable of acting autonomously - making choices, taking initiative, setting his own course for problem-solving."**

Another method with considerable potential for advancing verbal-conceptual skill, particularly in communities without resource constraints "is the more familiar use of planned lessons and readymade materials for teaching specific aspects of such skill. Materials for providing pre-structured experiences - such as form boards, Lotto games, matrix games, the electric typewriter - are abundantly available today, since innovation has been prolific in this area."***

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* Ibid., p. 251

** Ibid., p. 251

*** Biber, Barbara, *Goals and Methods in a Pre-school Program for Disadvantaged Children*, in Spodek, B., op. cit., p. 256

G. AS CUSTODIAN AND SEEKER OF KNOWLEDGE AND LEARNING

One of the virtues of a teacher most admired everywhere by the learners - young and old alike - is his ability to respond correctly to questions, to stimulate further questions and to clarify confusing points.

If the teacher is not to disappoint the children, it is necessary for "the kindergartener...to understand the subject, because only then can she respond to the inquiry of the child with the correct response. Only then can she ask the question which will lead the child to the solution of the problem. Sometimes she also has to give the child the information he needs to allow him to continue with his experimentation." *

"From the children's play and their conversations, the teacher will get clues as to what their confusions are. For example, a child may find an insect. She calls it a name. Other children may call it other names. The teacher is able to clear up this confusion. She is able to help certain concepts to emerge as the children make comments." **

*Of course this does not mean that the teacher can always answer a question or immediately remove a confusion. In such cases "she should direct the child to the right address, whether it be a person or a book, to get the answer. There are times when the kindergartener will answer frankly: "I don't know". In this way the children learn that adults also don't know everything. Here the child begins to understand the infinite nature of knowledge and accepts the fact that even the adult has to keep on learning more and more..."****

* The Active Child - the Learning Child - A Handbook for Kindergartens, op. cit., p. 62

** Infant and Nursery Curriculum, Introduction

*** *The Active Child - the Learning Child - A Handbook for Kindergartens*, p. 62

H. AS DIAGNOSTICIAN

He must indeed be an exceptional child who does not experience some growth problem during the pre-school period.

Some of the common symptoms of maladjustment are: negativism, refusing to share, jealousy, arising from the arrival of a new baby in the family, thumb sucking, shyness, leaving a task uncompleted, crying easily, complete withdrawal and loss of interest in what is happening in the environment, misrepresenting facts and temper tantrums. In dealing with such symptoms, the essential task for a pre-school teacher is to see himself in the role of a diagnostician whose primary responsibility is to offer the child learning experiences that are relevant and appropriate to his particular need and background.

This is by no means an easy role, but will be greatly facilitated through the development of a particular kind of relationship between him and the child -

> "a relationship that offers wholehearted support while it controls and channels behaviour. Here the teacher's choice of method is tied not only to the goal of establishing the emotional equilibrium needed as the basis for learning, but also to the goal of developing an autonomous, self-initiating human being." *

I. AS BRIDGE BUILDER**

In many countries there are important differences between contemporary programmes and older programmes of ECCE. The differences " lie both in the involvement of parents and community members in the determination of services being provided and in the proliferation of newer models of early childhood education. A decade or more ago

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* Biber, B., *Goals and Methods in a Pre-School Program for Disadvantaged Children*, in Spodek, B., op. cit., p. 259

** For some information on the existing patterns of co-operation between Home and Pre-school institutions, see Digest III -Zero through Six: Learning and Growing; What we know of the Very Young Child, p. 82-83

the parents of children in an early childhood program were related to the teacher in a manner most characteristic of the client- professional relationship found in the medical profession. The professional (in this case, the teacher)knew what was best for the child and told the parents and the child what the appropriate treatment (here, an educational program) ought to be. More and more programs, including those for the poor, now* require that the professional meet with parents to identify the needs of the child through dialogue. Possible solutions to educational problems or program designs are presented for parents to approve, much as an architect might present drawings and plans to a client for whom he is constructing a building." **

Parental co-operation, preferably with direct parental involvement in the day to day work of the pre-school institution, is particularly important for children from disadvantaged homes.

"Such involvement affords a valuable opportunity for the enhancing of parental self-image, particularly when

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* The creation in the U.S.A. of Head Start by Congress legislation in 1964 has contributed enormously to parental involvement in the programmes of pre-school education, particularly for disadvantaged children. "This new institution, while directed toward eliminating poverty, focused on the significance of parents in determining policies and programs that affected the education and welfare of their children. Parents had to be on policy boards and parent advisory councils of Head Start and were expected to provide volunteer services in Head Start Programs or, indeed, to become trained as staff. Parents could participate in determining the contents of the Head Start program and could help select staff." Grotberg, Edith H., *Chapter XIV: Institutional Responsabilities for Early Childhood Education*, The Seventy-first Yearbook of the the National Society for the Study of Education, p. 329

** Spodek, B., op. cit., p 4

this is confronted by the pressures of a more dominant subculture. The positive discussion between parents and educators of various values, attitudes, customs, and the reinforcement of certain aspects of these, can have the effect of promoting parental self-confidence and a more constructive attitude towards their children and the school. Additionally, teacher awareness and use of the potential resources of the cultural inheritance of the disadvantaged can both enrich the overall educational process by ensuring more meaningful curricular content and heighten the teacher's appreciation of that inheritance."*

A very important condition to facilitate parental involvement in the work of a pre-school institution "is to reduce parental feelings of alienation from the school by initiating frequent, always positive, communications to the home concerning the child's progress in school. Many parents have learned to expect only negative communications from the school, and this expectation must be changed before further progress can be made."**

A fruitful programme of parent-school and school-community collaboration should aim at making it possible for:

(a) parents to feel that they are accepted, and have an important contribution to make to the teachers' understanding of the pupils,

(b) teachers to realise that they have an obligation to share their knowledge of the pupils with their parents,

(c) parents to contribute to the school programme in such ways as:

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* *Curriculum in Early Childhood Education*, p. 31

** Hughes (Marie M.), Wetzel (Ralph J.) and Henderson (Ronald W.), *The Tucson Early Education Model*, in Spodek, B., op.cit., 241

(i) *maintaining and building equipment and school plant,*
(ii) *assisting with lunch duties,*
(iii) *lending and making materials,*
(iv) *enjoying an evening together,*
(v) *working on special projects,*
(vi) *organising picnics or other money-raising functions,*
(vii) *assuming responsibility for the administration of the school."* *

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* Grant, Dr. D.R.P., op.cit., p. 75

III PARENT-SCHOOL CO-OPERATION IN A CHANGING SOCIETY: TEACHERS LEARNING FROM DISADVANTAGED PARENTS

That parent-teacher co-operation is not a one-way traffic and that teachers stand to gain from it as much as the parents, is brought home by the following research investigation* carried out in Jerusalem.

"Project K.E.D.M.A., a Hebrew abbreviation for "Parent-Teacher Group Discussions," was conducted on behalf of the Ministry of Education and sponsored by the Henrietta Szold Institute of Research in Jerusalem in 1972.

(i) *"The Theoretical Background*

"The project is geared to enable parents, especially disadvantaged parents, to feel more confident in themselves as human beings and as parents.
There are three theoretical aspects to this project: the psychological aspect, the educational aspect, and the philosophical one.

(ii) *"The Psychological Aspect*

"The failure of the disadvantaged child at school is one of the greatest concerns of educators all over the world. Many systems, funds, curricula, theories, and experiments have attempted to find efficient ways to overcome the failure of children and the frustration this causes their parents.

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* Kolombus, E.S., op. cit., Appendix 3 - *Parent-School Co-operation in a Changing Society: Teachers Learning from Disadvantaged Parents*, by Nir-Janiv, Dr. Nechama, Ministry of Education, Tel Aviv, Israel, p. 186-190.

"Until the last two or three years, parent education was one-sided: teachers taught parents. My hypothesis was that if teachers would learn from parents, they could better teach their children. The child who comes to school at the age of three, four, or five has already an intellectual structure by virtue of his experience at home. His parents have built into their child a cognitive pattern and a reservoir of associations, perhaps a way of learning, according to their own experiences and socio-cultural background.

"A study by researchers Robert Hess and Virginia Shipman indicates that the educatability of the child is crucial. By educatability they mean the orientation skills and motivation that prepare the child to learn in a formal school situation. The focal point of their research dealt with the discrepancies between the behaviour of families of different socio-economic classes and the requirements for academic performance set by schools. Their finds show that social experiences of children affect their cognitive behaviour and eventually their academic performances. Patterns developed before formal schooling can either impede or enhance the child's success in the academic setting. From the point of view of these researchers, the cognitive development of children can best be understood in terms of mother-child interaction.

"Teachers ignorant of parent-child interaction at home can impede children's cognitive, emotional, and social development and growth. Therefore, teachers must be aware of parents' methods and integrate in order to create a more integrated environment and in order to make schooling for young children meaningful and relevant.

(iii) *The Educational Aspect*

"In order to reconstruct parents' positive attitudes toward themselves and their children, project K.E.D.M.A. has tried to upgrade their past, their culture, and their values. Such an approach can enhance their role as parents. At the same time, teachers discover a wide range of cultural values, a variety of habits, and interesting ways of child rearing. All this rich information and understanding of families of different cultures can develop more sensitive and flexible teachers and educators.

(iv) *The Philosophical Aspect*

"A pluralistic approach to culture -everyone has the right to be different and equal- is the basis for creating the I-Thou dialogue between parents and teachers. As for the child he feels that the most "significant people" in his life, mother and teacher, care together and cooperate to create an optimal environment and meaningful cosmos, where he belongs, creates, and acts.

"In order to create such a climate of empathy and openness, we tried the method of group discussions. The teacher was the passive leader and the parents talked and expressed their ideas and points of view about child-rearing. The content of the group discussions dealt with the parents' past, with their opinions about "the good child", how they teach a child to be "good"" and how their parents taught them to be "good." Other kinds of questions the parents discussed were "didactic" questions: How do you teach children to count? How do you teach them colours, family relationships, new words, and stories? What are the stories parents remeber from their childhood?

"Parents were very active during the group discussions. In the beginning they were very reticent. They could not believe that the teacher was asking *them* for advice. They were slow in thinking and in talking. But during the year they became more and more trustful and articulate.

(v) *"The Methodology*

"The sample consisted of 269 parents from disadvantaged communities and 90 parents from middle-class communities. Only 19 parents dropped out. There were 13 teachers participating in the project. Nine of them worked with disadvantaged children and four teachers with middle-class children. The teachers were selected on one condition: that they be ready to spend their time working with parents. The children were 4 and 5 years old.

"A pilot project was organised with 20 parents form disadvantaged communities. I led a group discussion with them, asking them how they teach their children. The parents were surprised, 'How come you, the professional, ask us such a question? We don't teach, teachers teach.'

"A father was the first who became aware that he teaches his child. "I teach my son arithmetic - I teach him to count. We climb the stairs and we count: up - 1, 2, 3, 4, 5; down - 5, 4, 3, 2, 1." A mother told us how she teaches her child to count: "We are ten numbers in our family, so my daughter counts everything: 10 beds, 10 shirts, 10 plates, etc." Another mother told us how she teaches colours: "I give my child sweets of different colours - red, white, green. My daughter always chooses the red, she knows colours."

The parents become very excited and even described our discussion as "so beautiful, like a wedding."

"The actual research started with interviews of parents and teachers. The questionnaires dealt with the following topics: parents' attitudes to their ethnic cultures; parents' educational interaction with their children; and parents' teaching strategies. Teachers were asked about their attitudes to their profession, teachers' educational activities in the kindergarten, and their teaching strategies. The field work began in January 1971.

"There were 9 group meetings. Every teacher had 3 groups of parents - 10 parents in a group. The parents came voluntarily, the teachers were paid.

(vi) *"The Findings*

"Our budget was small, and we could measure statistically only one variable: the changes that occurred in teachers' attitudes - to parents, to their profession, and to their work.

"We chose two methods of evaluation: the pre-test and the post-test method and a comparative method - a control group. The teachers were matched by age, teaching experience, background, geographical areas, and the economic status of the children they work with. Teachers' answers were expressed in written form."

"In comparing the answer of the pre-test and the post-test, all 13 teachers expressed a deep appreciation of their profession as kindergarten teachers. Their common feeling in the post-test (after the group discussions with the parents) was that their profession was now more meaningful, that they had become "better people, more sensitive, and more ready to listen to others".

"Teachers indicated that a new kind of relationship was born: teachers trust parents and parents trust teachers. Teachers discovered that parents from poor and disadvantaged communities are worthwhile human beings who can enrich teachers' personalities and add a new dimension to their educational interactions with children.

"Another interesting finding was that parents changed teachers' concepts of values. In the post-test they expressed a more relativistic-pluralistic approach to values. This is a very important shift for teachers who work in a multi-cultural society such as ours.

"Teachers began to integrate in school curricula Middle East stories that they learned from the parents during the group discussions.

"Teachers' attitude toward didactic activity was interesting. Five of the 13 teachers applied the method of group dynamics with the children. Two teachers asked the children the same questions they discussed with the parents, recorded the answers, and played back the answers to the parents.

"To validate the changes in teacher' attitudes, we compared our experimental teachers with a control group. The difference between the teachers' attitude toward disadvantaged parents was statistically significant. The control group distrusted parents as a resource of information and indicated negative answers to the question: "Can parents change your personality?" They even rejected parents as active participants in school curricula."

IV TEACHING- LEARNING METHODS APPROPRIATE TO ECCE

Enough has been said in the foregoing pages of of this digest regarding the key significance of activity and play in early childhood education.

It is the dominance of the play-and-activity-centred approach to learning that makes early childhood education essentially informal and indirect rather than direct.

However this is not to suggest that there is no room for the use of somewhat more formal teaching-learning strategies in it; some that come readily to mind are the following:

- Lecture or exposition
- Incidental teaching
- Discovery or 'guided discovery' learning
- Group teaching
- Individualised learning
- Field trip and excursion
- Demonstration
- Exhibition
- Use of illustrated and printed material
- Methods using audio-visual aids such as film, slides, puppet show etc.

As the methods are common and all too familiar, it is hardly necessary to make any detailed comments on their application; however, a few points about some of them need to be made.

(i) LECTURE OR EXPOSITION

Despite its frequent use in many places primarily because of the advantage of economy, this method is hardly adapted to the needs of young children and, therefore, cannot be recommended for frequent or general use. Its' main drawback is in the passivity it tends to encourage among children.

"Research in the field of learning has proved that active participation in the learning process as experienced by the student in manipulating work, writing and speaking yields better results than passive exposure to information through reading or listening... ... Expository teaching strategy may be efficiently employed for some parts of an educational programme, such as in the explanation or demonstration of basic facts and concepts, but it is seen as being less efficient in teaching higher mental functions such as comprehension, application, etc."*

(ii) DISCOVERY OR GUIDED DISCOVERY LEARNING

The method is also called 'inductive learning' or 'inquiry learning'. "Beyer defines inquiry learning as a strategy in which the student has to identify the problem to be resolved, propose possible solutions, test these possible solutions against the evidence, draw the appropriate conclusions warranted by the testing, apply these conclusions to new data, and arrive at generalisations.

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* Lewy, A., op. cit., p. 39

"In the simplest of inquiry assignments, the problem and the method for its solution are provided to the student. In a higher-level inquiry assignment, only the problem is given and the student has to select for himself an adequate method for arriving at a solution. Finally, at the highest level, the student has to define the problem which is the subject of his inquiry.

"Bruner identifies four major advantages for using this strategy:

1. *Intellectual potency - if the student learns a principle through the method of inquiry (in Bruner's terms the word 'discovery' appears), he is more likely to use it for solving other problems.*
2. *Motivation - students derive more satisfaction from learning of this type than from expository learning, and therefore their motivation to learn increases.*
3. *The students learn the rules for solving problems.*
4. *Knowledge acquired by this method is more easily remembered than that which is learned through expository methods.*

*In recent times, the inquiry method has become a frequently used learning strategy."**

(iii) GROUP TEACHING

"Children learn from adults and from each other. When children are doing things together, they exchange ideas, experiences and feelings. They learn new things; they learn how to see the other person's point of view on

* Lewy, A., op. cit., p. 40

a cognitive, social and personal level. Interaction helps the child to learn about himself and about other children.

> "The kindergartener will encourage any situation in which children do things together. She will encourage mutual assistance and problem solving with the help of other children. She will help children to translate experiences into words, to express feelings and to reminisce. The intervention of the kindergartener helps the child to develop the ability to communicate and reduces quarreling, conflict and an atmosphere of competition. The kindergartener will help the child to fit into society, and learn the rules that will help him to maintain proper social acitvity."*

A good example of the effective use of the 'small group' technique is provided by the Tucson Early Education Model in which:

> "...most structured lessons are carried out with small groups in which the teacher, or her aide, work with about five children at a time. This makes it possible for the teacher to respond to each individual child, utilize his current skills, and build upon and extend this base. In traditional classrooms, in which a great deal of instructional time is taken up by total group activity, it is easy for a child to "tune-out".

In small group activities, on the other hand, the teacher can attend to each child every day, reinforce his participation, and help him toward the skills designated as program objectives."** A limitation of the strategy is that it implies increased personnel resources.

(iv) INDIVIDUALISED LEARNING

> "Two different types of individualised learning have been introduced in schools. First of all,

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* *The Active Child - the Learning Child - A Handbook for Kindergartens*, p. 52

** *The Tucson Early Education Model*, in Spodek, B., op. cit., P. 236

there are the highly structured individual learning kits. The learning tasks are assigned to each individual on the basis of diagnostic tests; in this way the student receives a learning task which fits his particular level of knowledge. The transition from one learning task to another is monitored by task-related tests. If the test results prove that the learner has mastered a given task, a new more complex task will be assigned; if he fails, he receives additional training material related to the same task.

"The second type of individualised learning, often called independent learning, is entirely unstructured. The student selects a certain problem and works on it for a while until he has satisfactorily completed his work. Individualised learning of this type aims, among other things, at enhancing the intellectual independence of the learner and his ability to make decisions." *

While the second type will be relevant to the learning needs of all children, the first type is particularly responsive to the needs of disadvantaged children or those with a handicap.

(v) USE OF ILLUSTRATED AND PRINTED MATERIALS

Methods using, among other things, illustrated materials and audio-visual devices are of particular relevance to early childhood education. As children reach the age of 5 and 6, the use of printed materials also begins to acquire new interest and significance; their preparation and use will also be given a somewhat more detailed consideration.

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* *Lewy, A., op. cit., p. 42*

Among the various aids to teaching and learning, pictures are important instructional devices at all grade levels. In the classroom, pictures can make a unique contribution to learning.

The study of pictures belongs to the field of observational learning which is a more fundamental and natural process than reading and listening. A fundamental technique of teaching in the pre-school and primary grades is the training of children in the habit of purposeful observation which call for the mental processes of association, reasoning, recapitulation and also the art of interpretation.

Studying pictures is only part of observational learning but within the classroom, it is a highly functional means of broadening the child's knowledge.

A number of criteria are available to guide the selection and making of pictures for small children:

Size: a large picture for the class to see clearly, a medium size one for group use, a small one for use by individual pupils.
Colour: the colours should give the picture some measure of realism, and help the children to make extra inferences.
Simplicity: the pictures should be uncluttered and present clearly what they are expected to portray; the lettering to be simple and properly spaced.
Vitality: pictures showing human beings and animals should portray them performing action.

LEARNING FROM PICTURE BOOKS

LEARNING FROM WALL POSTERS

BEST COPY AVAILABLE

Relevance: the pictures should say what words will not adequately say about a lesson. Basically, the pictures should clarify and enrich understanding.
Appropriateness: The picture should suit the maturational level, and the experiential background of the pupils

Pictures useful to teaching could be easily obtained from many picture magazines, newspapers or from many of the publicity materials published by various Government Departments such as Agriculture, Health and Industry and by industrial establishments. Teachers should take advantage of such free and inexpensive materials and start collecting them. These pictures can be cut and mounted on card-board or mount-board in order to preserve them. Pictures relating to particular areas of study such as General Science, Natural Science, Arts, Humanities, could be cut out from the magazines, newspapers and kept in separate files which could be called 'Picture Files'. The pictures could be selected and arranged on bulletin-boards and displayed in the school. Some lettering could be added to give a pleasing and dramatic effect to the display.

Teachers could discover many techniques to display pictures to stimulate learning in and out of the classroom. Right kind of pictures could be developed or collected to serve the purposes of:

1. *Providing an atmosphere for learning*
2. *Introducing a topic of study*
3. *Inviting participation*
4. *Creating centres of interest*
5. *Dramatizing a point*
6. *Reviewing and summarising a lesson*
7. *Testing learning*
8. *Developing critical judgement*
9. *Stimulating reading and writing*

LEARNING TO READ AND WRITE IN PRE-SCHOOL

CHILDREN ENJOY PICTURE BOOKS

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Properly made and wisely used pictures can help the teacher to speed up understanding, create enthusiasm and enjoyment of a kind that he or she might not previously have felt.

> *Since the chief value of pictures lies in their power to assist pupils to comprehend situations, conditions and happenings that lie outside their experience, it is obvious that the picture chosen for teaching should be appropriate to the age, experience and intelligence level of the children. It is worthwhile to gradually build up a collection of useful pictures. (15)*

(vi) METHODS USING AUDIO-VISUAL AIDS

> *Research shows that 80% of learning occurs through the sense of sight and hearing and, therefore, planned use of audio-visual aids which are essentially materials of sight and sound, help to improve learning and teaching. This important principle is the basis of audio-visual aids to education.*

Sound and image play such an important role in the learning process that a large number of sound and visual devices in the form of sound recorders, film projectors, film-strip projectors, slide projectors, overhead projectors, video-recorders, television, have been produced as a result of the development of technology in relation to education. These technological devices are a source of great help to teachers to provide exciting learning experiences to children.

Foremost among them is the tape-recorder for language teaching. It provides immediate facilities for recording speech as soon and as often as may be required.

SEEING A PICTURE IS A SHARED EXPERIENCE

BEST COPY AVAILABLE

Recordings are another source close to the reality level of experience. Music, the human voice, songs of birds, calls of wild animals, are available in recordings on magnetic tape and discs for giving a new quality to children's experience.

Such modern aids as the tape-recorder, the film projector, the slide projector, the overhead projector and the video-tape recorder provide the possibility of a much fuller and wider visual presentation of objects and events than the teacher's ingenuity could ever produce previously. Slides, film-strips, flannelgraphs and other aids can bring into the classroom a representation of virtually all objects, situations and actions of normal life. The presentation can also be controlled and graded, so that there is systematic progression from one point to another.

"Audio-visual equipment may be used to provide information of a type which would be difficult to present by other means. For example, it can take the viewer to distant parts of the world and present authentic pictures of strange natural phenomena, remote places, life patterns in different cultures, etc. Motion pictures commemorating major events of recent decades are available and through skilful cutting and editing it becomes possible to present the student with authentic pictures not only of the present but also of past events." [4]

[4] Lewy, A., op. cit., p. 52

PART THREE: NEEDED FACILITIES, EQUIPMENT AND MATERIALS

I BUILDINGS

Brief comments on the building and space requirements of and equipment commonly used in pre-school institutions have already been made in Digest II*. Some additional comments on these needs and how best to meet them are now in order.

In developing countries almost any space can be used for pre-schools. If special buildings are to be constructed, quite simple shelters are sufficient in warm climates.

There are many excellent pre-school groups in countries such as India, Sri Lanka and Thailand where the accommodation is a thatched roof held up by from four to six posts over a concrete or paved base. An area of 40 to 50 sq. metres is sufficient for 30 children.

Anutai Vagh's perception of the space and accommodation problem and how it could be overcome within the resource constraints of a poor rural community is reproduced below.** The setting is Indian, but the suggestions made by her have relevance to conditions obtaining in many other third world countries.

> The first important and urgent job of a Balwadi teacher is to find out a suitable place for a Balwadi. There is ample empty space in a village but there are practically no spacious buildings to accomodate a Balwadi.

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* *Battling Costs for Quality and Quantity: Emerging Responses in Early Childhood Care and Education*, pp 23-27

** A short reference to the problem of finding a suitable place for a Balwadi was earlier made in Digest II, p.120

Village people often live in small hutments. Usually there is only one room where they do all the daily activities. They cook there, they sleep there, they have their small storage there; pots and pans and clothes etc., i.e. everything they possess is all there. Very often even a calf or a goat is also accommodated in the same room. A hut of this type is of no use for a Balwadi. There are a few brick houses but those are always used by the families for their own use.

"Village temples often have enough space to accommodate a Balwadi in its Sabha-Mandap; but constant coming and going of people is a nuisance for a Balwadi worker.

"A 'Dharmashala' or a 'Sarai' is big enough to accommodate a Balwadi but usually it is crowded and the same disturbance of persons coming and going is no good for a Balwadi.

"In villages it is possible to start a Balwadi, in the shade of a big Banyan tree or a Mango tree. The shade is always spacious and the place can be cleaned but that cannot be a permanent arrangement as it cannot be used in the rainy season. Moreover, the problem of storing equipment and other things cannot be left in the open. The teacher will have to store them at some available place or bring all of it with him every day which is impossible. What we really need is a properly enclosed construction or a shed. As there is ample open space in villages, it always pays to build a spacious hut of our own according to our needs. Initial cost of such construction comes to about Rs. 5,000/- but it saves rent and we can have a place according to our own requirements.

"As far as possible the place should be in the centre of the village and away from a market or a business place. It should have a well, if not, some water storing arrangements quite nearby. All the waste dumps, if any, on the open ground should be cleared off first and the place be made quite clean.

"While constructing the hut we have to see that some empty space is kept all around the hut as a compound. However, the court-yard in front of the hut should be bigger and more spacious than the back yard.

"A built up area of about 50 x 40 square feet is quite enough to accommodate 50 to 60 Balwadi children. The built up area should consist of three rooms. One of the three rooms should be quite big and spacious. There should be small verandas, if possible, on both sides of the hut; if this is not possible, at least on one side of the hut. Walls inside the rooms need not be built high up to the ceiling. What is important is to have all rooms well ventilated and well lighted. Doors and windows should be provided, keeping this view in mind. If it is not possible to construct 'Pucca' walls, walls of any material, brick or mud or 'turati' (dry sticks of Tur Plant) can be used for walls, but they should be given a thick coating of mud and cowdung mixture and be made quite smooth. Flooring every where in a Balwadi should be well rammed with murum and water. It has to be firm, smooth and nice. It should be coated once a week or a fortnight with a mixture of mud and cowdung. It is necessary to have a compound for the whole plot. Both yards inside the compound should be well rammed and also be smeared with mud and should be kept near and smooth. In fact they should be well rammed with murum and water.

"A small garden all around the hut, small vegetable beds at some places inside the compound wall give the whole place a pretty and cheerful look. If there is a tree in the compound, a seat can be made under and around the tree, because children love to work under a tree.

"The open space around the hut should be big enough to accommodate a play-ground, a small garden, latrines, urinals, washing places and dumping pits. For the last four items, places should be reserved and the teacher has to be vigilant about the proper use of all these places." *

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* How to run a Balwadi, A. Vagh, pp 14-16

II EQUIPMENT AND OTHER MATERIALS

A. SOME GUIDELINES FOR CHOOSING EQUIPMENT AND OTHER MATERIALS

Mialaret offers a number of guidelines in the choice of pre-school equipment and other materials.

> "Equipment must not be selected at random; it must possess certain psychological and pedagogical properties, not necessarily those which are stressed by publicity.
>
> "The first requirement is that it must be strong, for children are put off by equipment which does not stand up to rough treatment, and the very fact that it is not easily broken has its educational value. Equipment which easily falls to pieces is dangerous; it is also costly, since it has to be replaced frequently.
>
> "It must be attractive, and pleasant to use. Attention must always be paid to the aesthetic aspect of everything children come into contact with. Though children may handle what they are given differently from adults, it is always possible to give them things which are in good taste.
>
> "It must be polyvalent. Adults do not always foresee all the uses a group of children will make of equipment. Faced with a new piece of equipment, a child will experiment, submitting it of his own accord to various tests which lead him on to new activities.
>
> "The size of the equipment is important. Children at the pre-school education level differ in age, which means that they are at different stages of motor development and unable, therefore, to grasp objects in the same way.

The clumsy little hand of a three-year-old is incapable of picking up small objects which the five-year-old handles deftly. Small children like large objects which they can clasp in their arms; but a child a few years older - at the age of five or six - takes pleasure in showing his skill in handling smaller things.

"Equipment must meet the children's needs, and must not be forced on them. There are certain basic needs it must meet so that the child has a spontaneous urge to handle and use it. The main needs are as follows: need for activity; curiosity; need to build and destroy; need for self-expression; need for personal creation.

"Equipment must allow certain psychological and intellectual functions to come into play. Certain classification games bring into action the fundamental psychological structures which are found in all intellectual activities. Thus the games children play with such equipment are of great educational value, since the child unconsciously organizes his own experience, thus laying the foundations for logical thinking at a later stage.

B. DIFFERENT CATEGORIES OF EQUIPMENT

"There are three different categories of equipment: Equipment bought ready-made, for immediate use. It may more or less meet the children's needs and be suited to the activities organized by the teacher; but it is seldom functional or polyvalent (with a few outstanding exceptions), and the qualities that "sell" it are not always the ones that pre-school educational institutions consider important.

Natural equipment - objects collected and looked after by pupils, teachers and even parents themselves. These are often very valuable, owing to the fact that they belong to the child's familiar world. The use of such objects accustoms the child to observe his surroundings and to take a new look at the things he is familiar with.

Equipment specially made by teachers, parents or children (school or pre-school age). For certain purposes (such as marionette shows, for instance), the teacher makes the equipment she thinks most suitable. To please the children, parents can take part in the work of the school by making collective toys, for instance, or sets of individual toys. Such equipment is usually the object of much affection, and has the added advantage of bringing the parents and the environment into a closer relationship with the children's school life." *

These guidelines apply to rich and poor countries alike. In so far as developing countries are concerned not only has reliance on "natural equipment" and "equipment made by teachers, parents or children" to be much greater, they have also to show greater resourcefulness in meeting their needs for the other category of items.

"Mahatma Gandhi once laid down the following three rules for a Balwadi teacher:

(1) As far as possible the Balwadi teacher himself should make the appliances to be used in his Balwadi.
(2) As far as possible they should be made from the material available locally.
(3) It may not be possible for a teacher to make all the apparatuses; in such case he should get them done from the local artisans. **

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* Mialaret, G., op. cit., p.40

** Vagh, A., op.cit., p. 104. For a list of equipment recommended for a Balwadi see Annex p.140

Resourcefulness on the part of a pre-school teacher, however, is a virtue as pertinent to work in a well-endowed community as in a poor one.

C. OBJECTS TO COLLECT AND SAVE

"Be sure to keep an eye on your art materials and supplies. A periodic check will enable you to have materials on hand whenever you need them. In addition, you might constantly be on the lookout for objects that will help stimulate the art activity. You can probably add to the list below.

acorns, nuts, coconuts
aluminium-foil pie tins
balls
bamboo
beads
belts
bleach bottles
bones (can be bleached)
bottle caps
bowls
boxes (all sizes)
bracelets
branches
burlap (also known as crocus bag or yutta)
buttons
candle stubs
candy wrappers
cans
canvas
cardboard tubes
cartons (eggs, etc.)
cellophane
celluloid
clock springs or insides
cloth
clothespins
coconut husks
confetti
containers for pills, etc.
cord
cork
corn (maize) husks
corrugated cardboard
cotton
crystals
curtains
detergent bottles
dowel rods
elastic
excelsior
fabric scraps
factory discards
feathers
felt
fish line
flannel
fruit pits
gourds (calabash)
hat boxes
hooks
horseshoes
inner tubes
jars and lids

junk hardware (screws, nuts, bolts, etc.)
kegs
knobs
lamp shades
leather remnants
leaves
linoleum
magazines
men's old shirts
metal foil
muslin
newspapers
nylon
oilcloth
old holiday cards
old kitchen utensils
old smocks
pans
paper bags
paper doilies
paper plates
paper produce trays
paper tubes
parchment
paw paw stems
pebbles
pencils
picture frames
pillows
pine cones
pins
pipe cleaners
plastic
plastic table cloths
raffia
rawhide
ribbons
rings
rocks
rope
rubber bands
rubber tubing
rubber typre
rulers
safety pins
sandpaper
seashells
seeds
shaker cans
sheepskin, chamois
shoe bags
sisal
sponges
spools
sticks
stockings
straws
string
styrofoam
tacks
tin cans
tissue paper
telephone wire
wallpaper
wax paper
window shades
wire
wire mesh
wood cylinders
wooden beads
wooden moulding strips
wood pegs
wood scraps
wood screening
wrapping paper
yarn" *

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* Kolombus, E.S., op. cit., pp 73-75

To return to the situation in the disadvantaged communities, happily there is a greater awareness that "because of the absence of adequate funds for equipping these schools, it is important for training staff, and teachers and parents to explore the possibilities of improvising materials, and of maximising the use of existing facilities and resources. It is imperative that the Trainer and the teacher plan for and provide the kind of physical environment and practices that will foster creative experience, individual learning and group relationships in living, thinking and working together.

"In the rural areas the schools are blessed with a number of trees in or near the premises. Teachers are therefore shown how to reduce crowded classrooms by using the shades provided by these trees as "overflow" class-areas. Additionally, some of these trees have been used to improvise play equipment for the playground. They accommodate swings, and climbing apparatus like ladders. The trunks of the trees where available are being used for climbing and riding games, and for playing "hide-and-seek" games; and the wisp is used as rope for the swing, and for skipping.

"The used tyres from the motor car/truck do not escape the ingenuity of the teachers and P.T.A.'s. They are being used as seats for the swings, as tunnels for crawling through, as sand-pits, as flower-pots for beautifying the school premises, and as seats for classes that are held under a tree.

"Most teachers in the rural areas have begun to realise that a large part of the activities for 3-6 year olds must be out-of-doors. The children's contact with nature is becoming more meaningful;

they are becoming familiar through their sensory experiences with the earth, the plants and the animals which their parents and adult neighbours meet so much in their daily work. There are opportunities also for them to care for plants and animals and watch them grow. The Basic School teachers have begun to see the curriculum content in the environment of the school, and, therefore, they plan and organise more field trips with more specific objectives." *

*Teachers and teacher-trainees are also showing increased appreciation of the need for use of 'found materials' (junk, waste materials, discarded bits and pieces) to make teaching aids, or to motivate the pupils to create something. This was specially important because of the limited budget, and because parents found pleasure in collecting some of the "discards" and in making things from them." ***

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* Grant, Dr. D.R.B., op. cit., p. 39

** Ibid., p. 121

III BOOKS AND/OR PRINTED MATERIAL

A. KINDS OF BOOKS AND PRINTED MATERIAL OF INTEREST TO THE YOUNG CHILD

While printed material should be provided for pre-school school children under 6 years of age, the material need not always be in the form of a book. In fact, books are more appropriate for older children.

Little children are seldom absorbed by a single activity for a considerable length of time. Their whole life is an accumulation of short-term experiences from which a pattern of understanding or perhaps more accurately perception of the life into which he or she is growing, emerges.

Certainly for younger children single printed sheets with a pictorial message will be more helpful for learning than a book involving a great deal of text.

The single sheets on which pictures illustrating familiar materials, animals, plants, and human situations within their experience are printed can be on many different surfaces. If they are to be tough, plastic laminated card or even cardboard is excellent for your children. Printing on cloth, which was once very common in western countries, is now being tried out in some developing countries. Silk-screen printing on cheap long cloth provides attractive and durable material with the double advantage of being inexpensive as well washable.

The very young will be happy with printed materials about single episodes. The teacher or other learning mediator can do a great deal to develop vocabulary and understanding of the society in which the child lives by talking about, developing stories or asking questions about pictures drawn from the life experience of children.

B. SPECIAL CONSIDERATIONS CONCERNING ILLUSTRATIONS IN PREPARING BOOKS/MATERIALS

Printed material for children of pre-school age has a validity over a relatively small geographical area, as pictures which are too far removed from their life experiences are of little use in stimulating them.

> In India, for example, printed material has been developed and is now being tested, which has been prepared by artists and educators who went to live among the deprived rural populations being served by new printed material. Their experiences highlight the importance of deep involvement of authors and illustrators in the environment represented in their books or materials.

It must also be appreciated that the ability to interpret two dimensional drawings is one of the skills *acquired* by educated adults.

> In particular, studies in Africa have shown that even adults have the greatest difficulty in interpreting line drawings if their development did not include experience in interpretation. A simple example is that the use of perspective to indicate spatial relationships will not be understood without experience, perhaps one should say, training. It will be found that books for very young children prepared by knowledgeable illustrators do not use perspective.

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in the provision of illustration for the very young. Few countries have such specialist illustrators. It is important, therefore, to make maximum use of the few training facilities which exist in the world for this purpose.

C. EXPERIENCE OF INDUSTRIALIZED COUNTRIES

Preparing printed material for pre-school children is a developing art in all countries and much more experience is needed before there can be real confidence that we know enough to help disadvantaged children in the less developed countries of the world. While experience in these countries grows we can benefit from experience in the countries where there have been many years of experience of preparing books for very young children.

From publications in use in industrialized countries, it appears that, for the very young, aged 1 to 2 years, illustrations of familiar activities such as eating, playing, going to bed, getting dressed are appropiate themes for "baby books". Any written material associated with the illustrations would be for the parent, older brother or sister or other helper. As the children get older - say up to 3 years - the illustrations range a little wider and include experience of their senses, what the child hears, sees and feels and what activities he or she may do of his or her own volition.

As children approach four years of age, association with children and adults outside the family and participation in activities and play with others are encouraged by suitable illustrations.

At the same age, children are ready to increase their vocabulary and understanding of their world by introducing comparisons such as large and small, more and less, long and short, indoors and outdoors. This kind of experience is a necessary pre-requisite for a proper understanding of number.

As the children get older, they are provided with charts, cards and "short-length" books which introduce a sequence of events, perhaps a story or a sequence in the life of a familiar person such as the child's mother, a farmer or a fisherman. At the same age the alphabet or word characters are introduced with simple words.*

The packaging industry, in some countries, has begun to play a significant role in providing printed pictorial materials for children of pre-school age through paper bags, cartons, food-wrappers, etc. In Portugal, for example, the material is designed to serve specific learning needs of these children. (16)

IV. AUDIO VISUAL MATERIALS

A. CATEGORIES OF AUDIO-VISUAL MATERIALS

The various categories of audio-visual materials and equipment, both traditional and modern, may be classified as follows:

* If this is done in printed material for children under five years of age some will be ready to use this new experience in communication but many will not. Great harm can result if a premature attempt is made to force early reading skills on children.

A. *Visual aids or non-projected aids*

1. Pictures or illustrations
2. Photographs
3. Flash-cards or strips
4. Posters
5. Charts
6. Diagrams
7. Maps
8. Graphs
9. Comic strips or books
10. Picture-books
11. Exhibits

B. *Projected aids*

1. Motion picture films 8mm, 16 mm
2. Slides
3. Film-strips
4. Transparencies for overhead projectors

C. *Audio aids*

1. Radio
2. Recordings - Tapes, Discs

D. *Three dimensional aids*

1. Models
2. Objects
3. Specimens
4. Mock-ups
5. Dioramas
6. Puppets
7. Mobiles
8. Plantarium

E. *Display boards*

1. Blackboard or chalkboard
2. Flannelboard
3. Bulletin Board
4. Peg-board

F. New media

1. Television - Open circuit television and closed-circuit television
2. Video-recorder
3. Teaching machines
4. Computers
5. Language laboratory

G. Others

1. Audio-Visual Kits
2. Displays and Exhibitions
3. Programmed Learning Materials

H. Audio-visual equipment

1. Motion Picture Projectors - 16mm
   8mm - reel type
   8mm - film-loop or cartridge film projectors
2. Slide Projectors - Manual Type and Automatic
3. Film-strip Projectors
4. Overhead Projectors
5. Tape Recorders - Reel type, Cassette type
6. Opaque Projectors, Epidiascopes, Episcopes
7. Video-recorders
8. Television

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Here we see a wide range of audio-visual aids and equipment from the age-old blackboard to modern electrical and electronic gadgets such as the tape-recorder, the film projector, radio and television

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which have a compelling power to focus attention of children and challenge their imagination.

Most of these 'aids' are expensive, particularly such aids as films, film-strips, slides, transparencies which involve the use of costly projection equipment such as film projectors, film-strip projectors, slide projectors, overhead projectors. In the existing economic conditions in the developing countries, schools cannot afford to buy these costly instruments and materials.

But there are relatively cheaper or low-cost teaching aids such as pictures, charts, globes, maps, flannelgraphs, which are equally effective for teaching and learning in classroom situations and which can be produced by teachers with the involvement of children if they make efforts to learn some of the basic techniques of production such as drawing, lettering, colouring and mounting pictures. The blackboard and books, of course, are already in widespread use.(17)

B. PROBLEMS AND CONSTRAINTS

Any survey of the conditions of primary schools including pre-schools in the developing countries will reveal that not even simple visual aids such as pictures, charts, models, globes are available in many of the schools.

In many rural schools, even good blackboards or chalkboards are not available. Schools have no funds even to buy materials such as chart-paper, crayons, colours, pens, tracing paper to enable them to encourage teachers and students to prepare their own teaching 'aids'. It cannot be overemphasised that some basic materials need to be provided.

More than that training programmes need to be organized to enable teachers to develop skills and techniques of production specially by adopting low-cost locally available resources and using them effectively as integral parts of well-designed lesson.

It is presumed that pre-school and primary school teachers would be able to identify the existing local materials and resources which could be used in the preparation of some of the simpler aids such as blackboards, slates, charts, models, toys, card-games and other aids needed for providing rich and enjoyable experiences to pre-school and primary school children; wood, plywood, bamboo, locally-made colours, are some of them from which many types of simple teaching aids coulb be produced.

C. SUGGESTED ESSENTIAL MATERIALS

Drawing Materials: Pencils, erasers, crayons, poster colours, brushes (round and flat), drawing paper, still paper, coloured paper, brown paper, tracing paper, cardboard, strawboard, ink, pens.

Modelling Materials: Clay, plasticine, soap-cake, bee-hive wax, foot-ball bladder, corrugated board, adhesives.

Instruments, tools: Geometrical instruments box, footrule, set squares, scissors, sharp knife, hammer, screw driver, pliers.

Other items: Corks, rubber balls, mug, cotton, cut pieces of cloth, wood, jute cloth, flannelcloth, sand paper, carbon paper.

Audio-Visual Equipment: One cassette tape-recorder with spare cassettes.

In developing countries, schools cannot afford to have costly audio-visual aids and apparatus but inexpensive or low-cost aids such as pictures, charts, maps, globes, models for use in the primary schools, and educational toys, games for imaginative play in the pre-school institutions could be designed and produced locally. (18)

V. FURNITURE

Young children are seldom happy doing the same thing for long periods of time. It is for this reason, among others, that the rows of desks and chairs of the traditional school are inappropriate for the early years of schooling. They are even less appropriate for pre-school children.

Very simple benches and tables are all that is needed. If they are light enough for children to move about so much the better. Wooden boxes about .25m x .40m x 1.00m can serve for seating and as work surfaces.

If the children are together for many hours, sleeping facilities will be needed. In many countries clean woven matting is sufficient.

Where bamboo is freely available, a great deal can be made from this versatile material. The book "Livre des resources pour l'éducation préscolaire" * gives numerous examples. A few need careful consideration as they have somewhat hazardous projections, for example wooden pegs to hold ropes. These should be driven right into the ground.(19)

In July 1981 the Government of Hong Kong issued a White Paper reflecting "the Government's concern over the need to improve the quality and standards of child care and education. The Government recognizes that investment in the young is valuable not only for its own sake but for the continued well-being of Hong Kong". The basic furniture and equipment for kindergartens as listed in the paper is as follows:

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* "Livre de Resources pour l'Education préscolaire 1978" Tor Horsten. Published: Unesco Bureau Regional pour l'Education en Afrique, Dakar, Senegal.

1. Tables and chairs as required (kindergartens which have desks should replace them with tables when the desks wear out).

	Suggested Dimensions	
	Age Group 3-4	Age Group 4-6
Average height of desk	510 mm	530 mm
Average height of seat	230 mm	250 mm
Average depth of seat	270 mm	270 mm

2. A blackboard with matt surface.

3. Low shelves, book shelves and storage cupboards/ units.

4. Display boards such as tack boards, magnet boards and felt boards.

5. One piano or any other musical instruments which can be used in musical activities, such as cassette-recorders, organs, and percussion instruments.

6. Provisions for play:

   (a) equipment for physical play such as slides see-saws, balancing beams, climbing frames, tricycles, rocking-horses/boats, collapsible tunnels;

   (b) materials for constructional play such as blocks, bricks, coloured beads, straws;

   (c) play materials which provide experience for the learning of basic skills in pre-reading and maths such as jigsaw puzzles, dominos, matching sets, peg-boards, lottos, counters, counting toys and picture cards;

(d) materials for imaginative play such as tea-sets, cooking-sets, dolls and clothes, post-office counters, shop-counters, "doctor and nurses" kits, puppets, toy-cars, farm sets, zoo sets, service station sets and road signs;

(e) materials for sand and waterplay;

(f) art and craft materials such as blunt scissors, newsprint, coloured papers, collage materials, brushes and paints of large crayons, coloured chalks, straws, modelling clay/plasticine and small blackboard/easels (at least four for each class).

7. A slide projector.

8. A medical room/sick-bay with first aid facilities. (20)

Anutai Vagh's list of necessary equipment for a Balwadi * takes into account the resource constraints of a disadvantaged community in India:

Equipment for Cleanliness:

Buckets (big)	6
Buckets (small)	12
Pans (Ghamele)	3
Watering cans	6
Pick axes (small)	6
Shovels (small)	6
Hoes (small)	12
Drinking glasses	12
Brass lotis	6
Mirror	1
Combs	8
Napkings	12
Towels	6
Dusters	12
Ladle to take water	6
Brooms	6
Doormats	3
Scissors to cut nails	2
Cloth pieces to dry after bath	25

Equipment for practical exercises:

Grinding stones	1
Small winnowers (supli)	6
Big baskets	6
Small baskets	12
Mortar and Pestle	1
Knives	4
Small wooden seats	6
Big bottles	4
Funnels	2
Small brass bowls	30
Small brass plates	30
Big spoons	3
Small spoons	6

* Vagh, A., op. cit., pp 131-132

Grating apparatus	..	..	1
A scale (for weighing)	..	..	1
Large bowls	..	..	2
Button frames	..	..	6
Lace frames	..	..	6
Earthen pots and plates			
traps etc.			

Music and Handicraft Material:

Cymbals	..	..	6 pairs
Tamborine (Khanjri)	..	..	1
Tiparis	..	..	24 pairs
Clay work pans	..	..	4
Wooden boards	..	..	18
Sieve	..	..	1

Drawing and Painting:

Earthen bowls big and small spoons, blackboards, chalk sticks, colours, Rangoli powder etc.

Sewing Craft

Sewing frames	..	..	8

Free activity

A box of building blocks, toys, several designs on cardboards and seeds.

Equipment for a playground:

1 slide board, 1 single bar, 1 double bar, different stairs, swings 2.

Wooden Furniture:

12 small tables, 3 shelves, 2 cupboards, 2 big black-boards, 12 small blackboards, 1 stand to hang towels etc. 3 stools, 2 ordinary chairs, 6 small chairs, 1 Table, seating mats.

Charts and Models: Pictures for children and books for the Balwadi teachers:

During the first year all the necessary equipment for cleanliness, for practical exercises, for Music and handicraft and for Free activity should be purchased. Later on every year some additional equipment and aids should be added.

VI. RECORDS AND RELATED MATERIALS

A. MAINTENANCE OF INDIVIDUAL CHILD'S HEALTH AND DEVELOPMENT RECORD

No matter how effective a particular teacher's style of work and no matter what particular methods or combination of methods he generally employs in organising activities and experiences for children, one condition on which a good part of the success of his vocation in the long run will undoubtedly depend is the care with which he maintains the individual cumulative records of children. An old chinese saying regards the weakest ink as stronger than the best of memories!

In the absence of such records, it is more than likely than a given child's needs for stimulation and physical care may go unmet during the most crucial period of his growth. Unless the primary focus of the programme is narrowly custodial, the plea that a teacher is too busy for such record keeping should never be accepted; many good pre-school institutions already treat this responsibility as an integral part of their essential function.

Each child's record should give his health record; record of mental development (intellectual, emotional and social); and any other significant event or information relevant to his development.

Keeping an individual file or folder on each child will help the teacher keep his record properly. As the teacher adds to the file throughout the year, the information will speak for itself.

(i) Health Records

The health record should contain monthly entries of the child's state of health, record any sickness and absence of that account and regular measurements of height and weight. As children grow rapidly during the pre-school years, regular recording of their weight is very important. If a particular day is fixed in a month for taking weights and another for measuring height say once in three months, the records can be maintained without much difficulty.

(a) Growth Chart

Here attention should be drawn to the use of the Standard Growth Chart recommended by the authors of *See How They Grow*,* The chart which the authors have evolved over a period of 16 years is illustrated below:

The Layout of the Chart

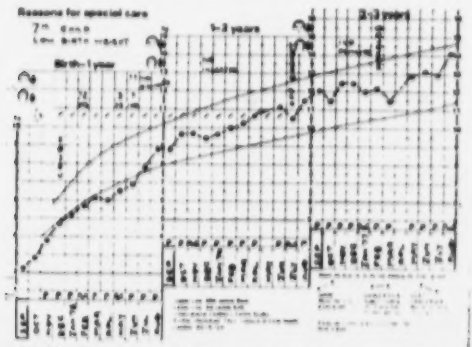

FIG. 3.1 This is the type of growth chart that has evolved over the last sixteen years. While being extremely simple it is, as shown in this manual, a document that can be highly sophisticated and pack with relevant information from which necessary decisions on the care of the child can be taken

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* Morley, David and Woodland, Margaret in the series called Macmillan Tropical Community Health Manuals (General Editor: Dr. J. Grant of London School of Hygiene and Tropical Medicine)

The value of the growth chart is summarized by the the authors as follows:

> It provides a continous record of health. When a child is sick, there is valuable background information to help treatment.
>
> It is the basis for comprehensive health monitoring and care. It avoids the dangers of giving a single response to a specific need, without consideration of the total picture.
>
> It encourages positive action for all children. Promotion of adequate growth is a more useful target than prevention of malnutrition.
>
> The chart is of the greatest value in terms of preventive action as it makes serious diseases of malnutrition easy to diagnose. The role of the wright chart is to identify the potential danger of malnutrition before management becomes too difficult at the primary health care level. The weight curve may identify trouble six month or even a year before the child has obvious signs of malnutrition. The opposite is also true. A child who is gaining weight regularly and whose curve is parallel with the curves on the chart will not develop malnutrition. (22)

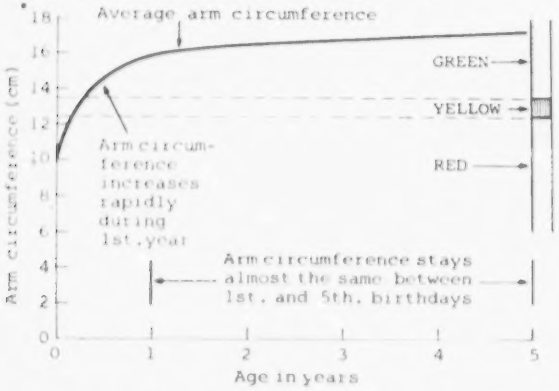
According to the authors, even an illiterate mother can easily be trained to maintain growth charts for her children. (23)

(b) Shakir strip

Another interesting device recommended in the book for determining the nutritional status of a child is the Shakir Strip - a piece of plastic or string or any other material which is flexible but does not stretch. It is used to measure the arm-circumference of children, which the authors state to be "an excellent indicator of nutritional status" with "the important advantage of operational simplicity".

When babies are about one year old they have quite a lot of fat under the skin of their arms. When they are five this fat is not there but there is much more muscle. This means that the circumference of the upper arm is almost the same between the ages of one and five years. (fig. 1) *

Fig.1 AN ARM-CIRCUMFERENCE-FOR-AGE GRAPH



The circumference of the middle of the upper arm changes little from the first to the fifth birthday.

Fig. 1

If we measure the middle of the upper are of children between the ages of one and five we can find the malnourished children. Malnutrition is most common at this age.

Tape measures are not always available and for many people understanding numbers is difficult. Instead people in many countries use a piece of string or a strip of material which does not stretch. Old X - ray film is very good. *Fig.2* shows how to make it and use it on the child. For further details, see APPENDIX III

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* Morley D., & Woodland M., *"See How they Grow"*, Monitoring child growth for appropriate health care in developing countries. p. 179

Most hospitals or clinics have old x-ray films. You have to remove the emulsion from the film. To do this soak the film all night in strong washing soda or diluted bleach. When all the emulsion is off you will have a clear sheet of plastic. Scratch the plastic with a sharp point to make one single line. Colour both sides of the film and use a spirit felt pen. The spirit pens smell. The water ones do not last on the film.

First make sure the child is more than one and less than five years old. Let the Child's arm hang loosely by its side and place the strip round the middle of the upper arm. (fig. 2) Look and see if the scratch comes in the green, yellow or red colours.

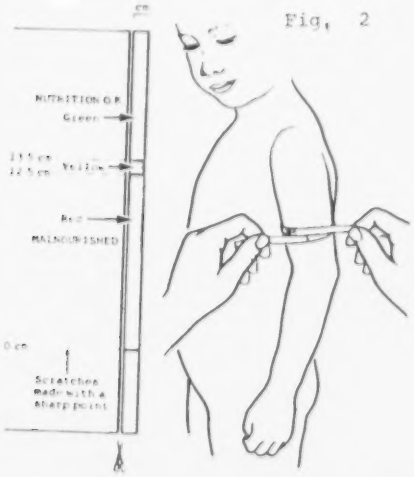
If in the green the child is well nourished.

If in the yellow the child is probably malnourished.

If in the red the child is malnourished.

This is an accurate way of finding malnutrition. (It is better than a SINGLE weight for age measurement.) The strip is as good in showing the nutritional state of children as experienced children's doctors. (24)

Fig, 2



(ii) Recording Mental Progress

(a) Anecdotal records

One simple kind of record "that is serviceable in providing a picture of a child, his personality, his abilities, his likes and dislikes, is an anecdotal record. This consists of a series of anecdotes or comments about events that occur to the child in the kindergarten...

"Whenever you see or hear something that you think is significant, make a quick note of it. When you have the chance, put the information into the folder of the child who is the subject of the particular incident. Since these incidents usually occur when you are busy with the class as a whole, you will probably have little or no time to write a report of the happening in full. It will be sufficient to jot down a few words on the incident to remind yourself about what happened. After the children have gone home, you can then go back to the folder and write a fuller description or report.

"Be certain to write the date and, if it is significant, the time of day when the event took place. As such anecdotes accumulate, you will be able to see them in the proper sequence. Here are examples of brief comments that could appear in an anecdotal record:

"Heather, age 4

November 3. Heather brought in a pumpkin. She was very pleased with it and showed it to all her friends. Everyone who saw it admired it with proper respect. But when Michael remarked that her pumpkin was going to die, Heather began to cry, insisted that her pumpkin was not going to die. Michael persisted: "It will live for a few days and then it will start to rot. That's the way it is with pumpkins unless you eat them." Heather was heartbroken as it began to occur to her that Michael's information might be correct. She clutched the little pumpkin to her side throughout the day and would not let Michael near it.

"Saul, age 5

April 4. Saul's grandfather, a carpenter, came from another village for a visit. Saul was enormously pleased by this, as his grandfather makes all kinds of wonderful wooden toys for him. Saul said to me, "Did you know that my grandfather knows *everything*.

"Robert, age 4

January 16. During the free-play time, Robert threw sawdust at Gerald. Lately, he has had many quarrels with his fellow classmates. *

(b) Frequency chart

"How does the teacher who is responsible for many children become aware of such circumstances? A simple chart can help. Take a sheet of paper and across the top write a list of all the activities you have available. Along the left margin of the paper, list the names of the children in the class. Hang this list high on the wall or on a cabinet where only you and other adults can see and use it. From time to time throughout the day, take a moment to observe who is working with which material. Note it on the chart with a check mark.

"Look over the list at the end of each week. Do some children have marks indicating that they played only in the doll corner? Which children worked in many different areas? If there are any significant findings about a child, write these down on his anecdotal record (e.g. *"Mauwra, age 5.* January 22. Mauwra worked every day this week with the large blocks. He experimented with magnets in the science corner on Tuesday and painted pictures on Monday and on Friday. He seems to spend most of the time, however, with the blocks.") **

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* Kolombus, E.S., op. cit. pp 164-165

** Kolombus, E.S., ibid. p.165

SAMPLE FREQUENCY CHART #

Week of.....

Activity / Child	Creative activities	Blocks	Science	Sand, water	Library corner	Manipulative toys	Cognitive games	Housekeeping corner
Charissa								
Srisombat								
Suchinda								
Pacharee								
Kariruh								
Yawapa								

SAMPLE PROGRESS CHART **

Date.....

Skills / Child	Identifies shapes	Sorts by colour	Understands number concepts 1 - 10	Recognises and names all letters of the alphabet	Cuts with scissors successfully	Solves simple puzzles	Repeats short rhymes	Follows oral directions	Works independently and with concentration
Ohad									
Oudi									
Arnon									
Karen									
Itamar									
Inbal									
Elisha									
Rachel									
Izachi									
Limor									

Key: A - always S - sometimes N - never

Kolombus, E.S., ibid. p. 166

** Ibid., p 167

(c) Noting the child's progress

"The same sort of chart can be used as a record of progress. In this instance, the criteria listed across the top of the chart will be skills or aspects of child behaviour that you want to judge.

"Records should be kept indicating the child's social, emotional, physical, and intellectual development. Note, for example, if he is a good listener, if he tires easily, if he is eating well. Does the child get along well with others? Is he a happy child or is he often afraid? Information about the children can be recorded in chart form or you can write individual summaries.

"Throughout the school year, keep samples of various types of art work that each child has done - paintings, drawings, collage, etc. Put them in the child's folder. By writing the name and date on each piece of work, you will be able to look back at them and see the various stages of progress as the child develops." *

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* Kolombus, E.S., ibid. p. 168

PART FOUR: CHANGING THE PRE-SCHOOL CURRICULUM: SOME CONSIDERATIONS

I FROM A "TEACHING" TO "LEARNING CURRICULUM

(a) WHAT IS A "LEARNING" CURRICULUM?

There is a lot of lip service given to the cruciality of the child's own interest and activity as the prime developers of his self-concept and learning, but the reality is very different. Many pre-school institutions the world over "invoke names like Montessori, Froebel, Rousseau, etc., in general, the activities are mostly structured and the 'backwash effect' of primary schools to which these children seek entry influences the pattern of working in these schools. In fact, in some countries, admission to prestigious primary schools has become a major issue, and nursery schools are even regarded as preparatory schools for such entry 'examinations'." *

The problem really is: how to change the prevailing teaching curriculum into a truly learning curriculum because 'teaching' and 'learning' mean very different things.

Teaching is an organized process through which one person tries to communicate and to impart some of his knowledge, skills or abilities to another. It is also called an instructional process. One demonstrates or instructs another. One person is in the position of a giver and the other in the position of a receiver. Two distinct roles evolve.

Learning is more than a process of receiveng. It is a process of internalization. It is a process by which a person comes to understand. It is a process in which active forces are moving and taking hold of the individual perspective of a person.

* Digest I: Our Future is in Our Children: the Case for Early Childhood Care and Education, p. 9

> *It is a process of insight into problem situations. It is a process of experience. It is a process which helps to change the perception of the involved individual. (95)*

In the case of the teaching curriculum, the curriculum is selected by some adult group, represented by the teacher, from situations which are completely foreign to the learner.

The learning curriculum, on the other hand is determined by the questions, interests and problems of the young learner himself, which must be responded to if he is to grow into a mature, fully developed individual. The contrast between teaching and learning curriculums, reflecting the real differences between teaching and learning, is sharp and clear. There is no middle ground. One either selects a teaching curriculum or a learning curriculum.

DIFFERENCES BETWEEN A TEACHING AND A LEARNING CURRICULUM

Teaching Curriculum	Learning Curriculum
Features:	Features:
1. Control and organization by adults.	1. Co-operative control by the group.
2. Children directed to achieve goals by adults.	2. Children working openly and intelligently to achieve their own goals.
3. The final goal is knowledge accumulation.	3. The learning goal is intelligent social action and individual maturation
4. Teach children parts of experiences of others with the idea that these will be unified at a later date.	4. Children refine parts of their own experiences but in an immediate global or total context. (26)

So how does one go about changing a teaching preschool curriculum into a learning curriculum?

B. INITIATING CHANGE AT THE GRASSROOTS LEVEL

In many places there is perhaps more curricular flexibility at the individual school or community level than we imagine. In general the teacher is in charge of, and responsible for what happens in his own classroom. He lives by certain administrative, technical and economic limitations, which come from outside his classroom or community, but these do not always limit his freedom to experiment. Nor do they stimulate it. The initiative of the individual teacher or learning mediator is probably the dominant factor in deciding if efforts will be made to change.

But many authorities responsible for ECCE may want to do something and not know how to start. What follows is a rather slow, but steady four-step plan for instituting curricular change at school level. No time specifications are set. That will vary from school to school according to local conditions.

Step 1: Form a small curricular committee of say 3-5 interested and knowledgeable members with teacher and community* representation. Its initial function will be:

a. Study and analyze the curricular pressures which come from above the school in the broader system;

b. Make a study of the needs, interests and problems of individual children and of the community as a whole;

c. Compare the existing curriculum with identified needs, interests and problems.

Step 2: Initiate a curricular change in the school which reflects the elements found in Step 1. This could be:

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* The term 'community' here includes the supporting bureaucratic and social service structure, if any.

a. At an experimental level - Here one or two teachers on a voluntary basis could initiate the experiment immediately;

b. At the school level (This would require a shock workshop or some type of previous teacher training).

Step 3: Evaluation of the curricular change. This should be the responsibility of the curricular committe. Evaluation could be in terms of:

a. Comparison in intellectual, emotional, and social terms of children in the experimental programme with those who were not;

b. Research study to see if the needs, interests and/or problems of the children have been satisfied;

c. Study of the reactions of the parents of the children involved in the curricular experiment to the changes.

Step 4: Extension of the curricular change (assuming positive results in the evaluation).

a. Training of the rest of the teachers in the school by those who have gone through the experimentation;

b. Constant contact and feedback from supervisors, other concerned officials, community members and children;

c. Programme of public relations to indicate clearly to parents and educators the fundamental ideas of the new programme, the process and the implications. This could be done through pamphlets, articles in the newspaper, publications in journals or in any of the mass media mechanisms available to the school. (27)

C. INITIATING CHANGE FROM THE TOP

There are many country situations where because of the central control of the educational services, the responsibility for curricular reform at the pre-school or any other level will rest essentially with a single organisation at the top. While this does not affect the conceptual validity of the 4 step model outlined above, the organizational and procedural aspects of the research programme may have to be enlarged and adapted suitably to meet national requirements.

> "If the producer of the new instructional materials is the classroom teacher, he will probably work alone or in a small team with several other teachers in the same school or in neighbouring schools. In curriculum centres, however, there is a need to establish proper division of labour and co-ordination between various tasks in order to ensure the production of adequate curricula.
>
> "In most curriculum centres a curriculum committee and a curriculum team co-operate in the production of a new programme. The curriculum consists of leading experts, such as university professors, top educational administrators and representatives of various interest groups, and is in charge of making general policy decisions with respect to the objectives or contents of the programme.
>
> "The actual work of producing instructional material* is carried out by a team.

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* While some of the terms used in this presentation are more appropriate to the school stage, their meanings and general significance for the pre-school stage are clear. For instance instructional material for pre-school children could include material for games to stimulate cognitive development, wordings of songs, stories and other language excercises, materials used by children to learn to count or to master the alphabet and so on.

Who are the members of such a team and what are their qualifications for participation in such teams? Curriculum teams are composed of people of different types. Generally, the most successful programme writers are experienced teachers, since they are acquainted with the type of language appropriate for a particular group of children and the kind of activity which will arouse their interest. They are also familiar with the activities and skills of the average teacher, and therefore can produce materials which have a greater likelihood of being used successfully in the school. Such a team is guided in its work by different types of experts. For example, specialists in a particular subject field will help in the selection of course topics and the 'product designer' will help in giving an appropriate form and 'finish' to all items prepared."*

Three other aspects of curricular reform within a 'centralised' context deserving detailed consideration are:

*(a) The preliminary try-out (of curriculum materials) ***
*(b) The field trial ***
(c) The nature of evaluation during the process of programme development, that is, during the preliminary try-out and field trial (also called formative evaluation).

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* Lewy, A., op. cit., p. 58

** Conceptually speaking, these two activities from part of Step 2 in the 4 step model on pp 155-156.

(a) "The Preliminary Try-out

"The preliminary try-out of curriculum materials is performed when the first version of the programme is ready for use in the classroom. ... ... The curriculum team will want to find answers to the following questions: What specific learning activities are difficult for the learner? What portions of the programme should be presented in a simpler form? Where are more exercises and repetitions needed? What can be eliminated from the programme without much loss? These types of questions have to be answered on the basis of empirical try-outs of the new curriculum materials.

"Ideally, the curriculum team includes at least one member who is knowledgeable and competent in the field of evaluation. This person must be aware of the overall aims of the programme and should help in carrying our the try-out. To avoid the danger of novel features of the programme being refuted by adverse critics before they have had a chance of being throughly examined in a large sample of students, it is recommended that evaluation at this stage be performed by a person who is a sympathetic co-worker of the team. External evaluation by persons who did not participate in the programme development should be postponed to the field trial stage.

"The preliminary try-out is conducted on a small sample made up of 4-6 classes. The classes are selected on the basis of the teachers' willingness to co-operate with the curriculum team. During the whole try-out process the curriculum team maintains close contact with the classes, discusses the problems related to utilisation of the new programme with the teachers, observes the classes and collects data of different types. The fact that only a small number of classes participate in the try-out enables the curriculum team to observe the process of teaching the programme in the classroom very closely.

As a result of analysing the data and collating the results obtained, the curriculum team revises the programme and prepares a penultimate version which then will be submitted to a field trial." *

(b) "The Field Trial

"The penultimate version of the programme is submitted to a field trial on a representative sample of the target population. Usually 30-50 classes are selected, depending upon the available resources and upon the homogeneity of the target population. In the case of a highly heterogeneous target population, in which regional, linguistic or ethnic differences are substantial, a stratified sample should be selected. This may require a larger number of participants than a simple random sample.

"In the field trial the curriculum team cannot maintain close contact with all of the classes in the sample, and it is often necessary for them them to utilise long-distance means of communication. For this reason, they cannot rely on their personal impressions and experiences to judge the successes or failures of the programme, and it becomes necessary for them to develop formal instruments, such as multiple choice tests and questionnaires, for the purpose of data collection.

"The field trial is designed to examine the efficiency of the programme. At this stage, the programme is almost in its final form and the conditions under which it is tested are more representative of those in the entire system than those of the preliminary try-out. For example, the teachers have been randomly

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* Lewy, A., op. cit., p. 62

selected rather than having volunteered, and the type of communication between them and the developers more closely reflects the situation which will exist in the entire system.

"If the preliminary try-out has been carried out carefully, the field trial will not result in major modifications of the programme, but rather in suggestions concerning the required conditions for the programme's use. Suggestions may be made concerning teacher training and physical facilities. Information will be obtained regarding the time needed for the course, the kinds of pre-requisites necessary, and the types of student most likely to benefit from the new programme." *

(c) The Nature of Evaluation During the Process of Programme Development

"The types of data used within the context of formative evaluation can be classified into three major categories: judgmental, observational and performance.

(i) Judgmental data

"The data provided from the opinions of the experts, teachers, parents, supervisors and students who have worked with the new curriculum material is called judgmental data. This type of data is gathered through the use of questionnaires and interviews. One advantage of judgmental data is that they can be gathered and analysed very quickly, and thus they can reveal both the strengths and the weaknesses of the new programme in due time to permit the curriculum developers to use the evidence without resulting in delay of development activities. A major source of

* Lewy, A., ibid. p.64

difficulty with this type of data is that they are not free of the particular biases and attitudinal sets of the respondents which may result in distorted responses; for this reason it is advisable not to rely solely on subjective opinions but to gather additional types of evidence also. Judgmental data can be used to answer the following types of questions:

"QUESTIONS ADDRESSED TO CURRICULUM AND SUBJECT MATTER EXPERTS

- -What relationship exists between the objectives, contents and learning strategies contained in the programme?
- -How accurate are the curriculum materials?
- -How well are the various components of the curriculum related to each other?
- -Does the sequencing of learning activities appear to be appropriate from the point of view of the subject matter as well as from the point of view of the learner?

"QUESTIONS ADDRESSED TO TEACHERS AND SUPERVISORS

- -Are the materials feasible and practical for use by the teachers?
- -Do the teachers need retraining?
- -Are the costs of the materials likely to be too great?
- -Are explanations and illustrations contained in the teachers' guide and instructional materials clear?
- -Is the difficulty level appropriate for the the target population?
- -What specific aspects are too difficult or too easy?
- -How relevant are these materials to the students' interests and needs?
- -What desirable or undesirable changes are likely to take place in the students other than those specified in the curriculum plan?

"QUESTIONS ADDRESSED TO LEARNERS

-Were the explanations clear?
-Were the materials too easy or too difficult?
-Were the materials interesting?

(ii) Observational data

"Observational data are collected through the systematic observation of teaching/learning situations in the classroom or elsewhere. Trained or untrained observers record their observations either in a free manner, or according to structured and pre-determined categories.

"Observational data are used to determine how the curriculum materials and procedures are actually employed in the classroom and whether they fit the criteria or specifications designated by the curriculum team. For example, information about the following items might be sought through observational techniques:

-The kind of questions raised by teachers;
-The roles students assume;
-The types of materials and equipment which teachers and students are expected to use;
-The way students are grouped in the class;
-The types of interactions (including questions and answers);
-Misinterpretations of the learning material.

Observation is carried out also to provide data about the learners' reactions to the instructional materials. Notes might be taken about the following things:

-Attention paid to the teacher's explanations;
-Involvement in performing required tasks;
-Interest in the study materials;
-Difficulties encountered in comprehending the materials or performing assignments.

(iii) Performance data

"This third type of data provides information regarding the central problem of curriculum development, that is, what is learned by the students when the curriculum materials and methods are used properly. While this may be determined in part through both observation of students and student reports, in most curriculum centres structured or semi-structured tests are used to determine what students can do and how they feel about what they have been required to do in the programme.

"Generally tests of this sort are developed after careful analysis of both the learning objectives for the programme and the actual curriculum materials.

"One advantage of this type of data is that they provide the most direct evidence about the effectiveness of the curriculum materials and methods, and as a result they can serve to support or negate the conclusions drawn from the other types of data which were collected at an earlier stage.

"For formative evaluation, the use of criterion-referenced tests is recommended. Each item on such a test represents a well-defined and specific behavioural objective. Unlike the commonly used standardised objective test, which tends to rank students according to their score on a particular test, the criterion-referenced test enables one to determine if a student has mastered particular objectives or not. Since the curriculum developer is interested in knowing what the weak points of the programme are and what portions of the programme require further revision, he has to obtain separate information related to each particular programme objective; it is not sufficient for him to know how an individual student performs on a test in comparison to other students of the same group, and therefore his purposes are better served by a criterion-referenced test." *

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* Lewy, A., op. cit., p. 67

II. THE TEACHER AND THE RESEARCHER

In developing a centrally planned curriculum, an important question concerns the respective roles of the teachers and the researchers.

> "While it is obvious that teachers must be involved in curriculum development if educational innovations are to be sustained in the classroom, disagreement exists over the level and type of such involvement.
>
> "According to one model (the 'linear' model) the starting point for curriculum development lies in the laboratory where basic studies are used to devise experimental materials which are then introduced to children on a controlled basis.
>
> "The involvement of teachers at this stage is minimal. Using the results of these controlled studies researchers then introduce the appropriately modified materials and activities into experimental schools, again with appropriate controlled observation. Since teachers in such schools now contribute their own observations and impressions, their role becomes more active at this stage. Finally, on the basis of the carefully recorded and analysed results of trial implementation in the experimental school setting, the curriculum is introduced on a wide scale throughout the school system.
>
> "Thus in this model the teacher becomes the collaborator of the research team only after the initial development has taken place but then has the crucial function of confronting the research and development team with experiences drawn from practical classroom realities. The model stresses the need for winning teacher support for the experimental work, and places responsibility on the researchers to demonstrate the reasonableness and feasibility of the propositions put to teachers.

"The rationale for the first model is twofold, resting on (a) the belief that it is unreasonable to expect the average hard-pressed teacher to make a time-consuming contribution to all phases of curriculum development (although this does not totally exclude the teacher's participation at any stage) and (b) the importance of bringing to curriculum development the best insights into the child's developmental needs, insights presumably gained from a solid academic input.

"The second model (the 'circular' model) seeks the fullest involvement of teachers from the very outset. This model is built on the assumption that no matter how carefully the research and development team may have done its work during the first stage of experimentation, the success or failure of the new curriculum must rest in the classroom. Therefore, as far as possible and without sacrificing the quality of the scientific and intellectual input teachers should participate to the widest degree in all phases of the curriculum development process, be involved in design as well as implementation and be equal and full partners in a process whose success or failure they will determine. From this point of view the first model offers too little room for teacher creativity to the detriment of the children as well as the teachers themselves. Past experience with highly centralised curricula seems to indicate that many teachers become overdependent on the programme introduced from outside, do not develop their own inner resources, and thereby tend to respond inflexibly to the demands and needs of individual children.

"There is also some question about whether one can afford to wait for the initial, experimental phase of the first model to be completed before launching much-needed innovation.

"It is evident that the differences between these two models is one of degree and that both present idealised pictures of the curriculum development process. Which model is adopted, and the extent to which the models are effected, will depend on the specific context in which development is taking place - for example, in situations where the academic background of teachers is limited, there would seem to be no alternative but to accept that a high degree of structured support for teachers is the only way to promote even a minimal degree of effective education. On the other hand, with maximal involvement of teachers as an accepted goal, the extent to which this goal is reached will depend, at least in equal part, on the willingness of programme developers to eschew the role of 'experts' and to participate with teachers on a meaningful, equal footing." *

III. A SIX STEP MODEL

Diagrammatically a simple curriculum development model whether to be used centrally or at the institutional level should look something like the following:

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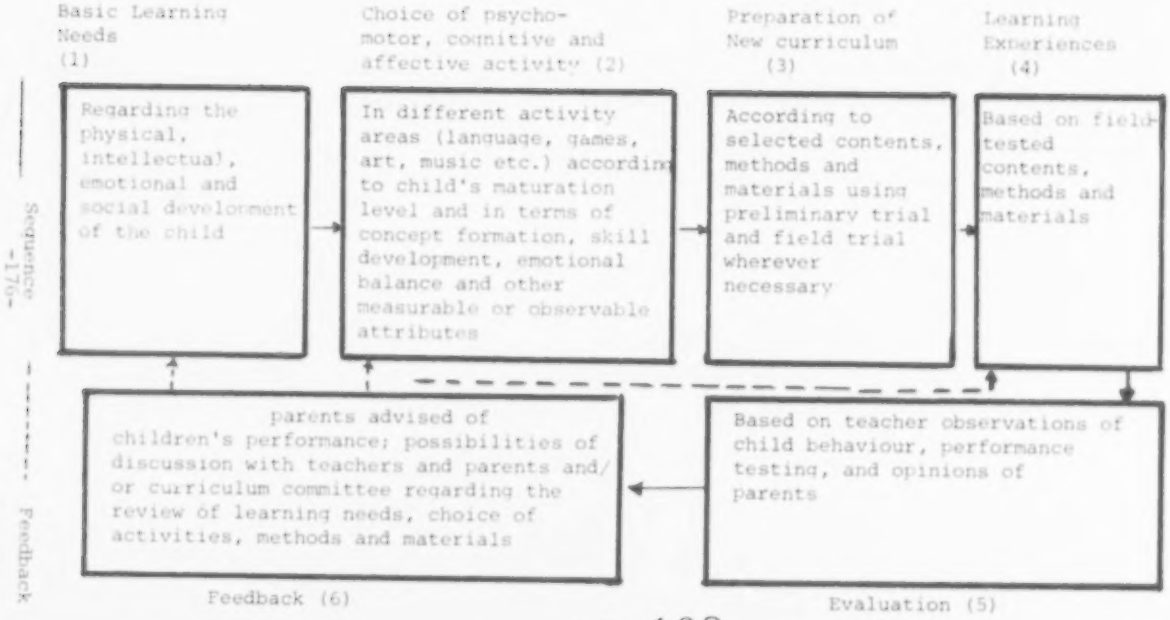
* *Curriculum in Early Childhood Education*, pp 26-28 Report of a Seminar held from 15-25 November 1972 in Jerusalem, Published 1974 by the B. van Leer Foundation, The Haque.


Basic Learning Needs (1)
Choice of psycho-motor, cognitive and affective activity (2)
Preparation of New curriculum (3)
Learning Experiences (4)
Regarding the physical, intellectual, emotional and social development of the child
In different activity areas (language, games, art, music etc.) according to child's maturation level and in terms of concept formation, skill development, emotional balance and other measurable or observable attributes
According to selected contents, methods and materials using preliminary trial and field trial wherever necessary
Based on field-tested contents, methods and materials
Sequence
Feedback
parents advised of children's performance; possibilities of discussion with teachers and parents and/or curriculum committee regarding the review of learning needs, choice of activities, methods and materials
Based on teacher observations of child behaviour, performance testing, and opinions of parents
Feedback (6)
Evaluation (5)

"Most curriculum theory experts emphasise the need to start the development of a programme by specifying a behaviourally-defined set of objectives. They stress that this is necessary also to enable the assessment of a programme's effectiveness in obtaining its goals. There are however opponents who believe that not always is it advisable or even possible to state objectives in advance. Elsner summarised his arguments as follows:

1. The dynamic and complex process of instruction yields outcomes far too numerous to be specified in behavioural terms in advance.
2. In certain subject matters, such as in the fine arts, n -el or creative responses are desired, and therefore the particular behaviours to be specified cannot easily be identified.
3. Not all outcomes of curriculum are amenable to measurement.
4. Educational objectives need not precede the selection and organisation of content*.

* Lewy, A., op.cit., p. 28

IV CRITERIA FOR DESIGNING AN OPEN LEARNING ENVIRONMENT

Partly to recapitulate the earlier discussions, but mainly to focus once again on the main theme of this digest, it is now proposed to address the question: *what general considerations should one bear in mind in designing an open learning environment for the pre-school child?* For an answer we again go to the New Delhi study group that considered the matter carefully.

> "The nature of the environment itself has its own set of criteria. Real life environments have far superior capacities for fostering learning than purely artificial environments. However combinations of the real and the contrived, in proportions and times appropriate to a given learning situation, produce better progress in learning, than either environment alone.
>
> "In general, the set of design criteria for intervention at the pre-school level may be summarized as follows:
>
> -Quality, relevance and quantity of the content of the intervention from the standpoint of designed inputs needed to foster total child development.
> -Integrated holistic approaches and strategies taking the total development of the child as the basis of the design for the intervention.
> -Planned sequences for elimination of perceived weaknesses and for making use of perceived strengths* particularly of children from disadvantaged environments.
> -Continuity of efforts in the intervention, providing opportunities for the practice and reinforcement of learning.

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* The Meeting repeatedly expressed its concern about making a special effort in the designing, to take into account the strengths of the learners, particularly those coming from disadvantaged environments.

-Reinforcement of aspects of development other than education, through other institutions and services touching the child, such as health, nutrition, guidance.

The following specific criteria or principles were also suggested for inclusion in the design of pre-school models:

-*Giving a heavy activity orientation to the programme. A choice of a large variety of activities should be available to widen the scope of child's experiences and to cater all aspects of his or her development. Many of these activities could be those the child is already skilled in, from home learning, but now used for further development of learning.*
-*The programme should involve much manipulation and interaction with objects, materials, equipment and people, leading to self-discovery of knowledge. Again, culturally familiar objects and materials should form a major resource for learning. Coming from the home environment, these are usually "low" or "no" cost items, and they lend themselves to mobilizing activities the child is familiar with, for further development.*
-*Equipping the child with certain competencies to cope with the immediate environment, like communication skills, and skills needed to look after one's own personal needs, including those required, for example, to deal with the hazards of living near a busy traffic area etc., if it may arise as a result of rapid social changes, leading to self reliance and independence. The self reliance developed in the home learning environment would need to be reinforced and extended, in the context of recognizing and mobilizing the strengths the child already has.*

-Children vary widely in their ability to learn and in the development of their physical capabilities. This basic design consideration should be taken into account pervasively in building programmes which, as a result, would permit an individual pace of development for the child. It is also important to note that the programme should be designed on the basis of child-to-child co-operation rather than of competition.

-Within any given developmental stage of a child, there are a series of progressive "mini-stages". The programme design should provide learning sequences which will consciously establish the pre-requisite competencies for all these mini-stages.

-For reasons of providing experience to the child in using "adult models" for such aspects as language development, and for other social and emotional development reasons, mobilizing the help of older siblings and adults in and outside the child's family, should be an integral part of the programme. In particular, "care taking" siblings should be involved in these programmes.

-The continuity of intervention beyond the pre-school is an important dimension and whenever possible this may be extended to the home through parental orientation and education."

And finally should not somebody ask the question: *what do young children growing up in a learning environment full of warmth and loving care look like?* Gordon Alexander** was a member of a group that visited China sometime ago and had a look at some of that country's educational

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*Study Group Meeting on New Forms of Pre-School Education, Final Report (mimeo) (New Delhi, 25-30 April, 1983), Unesco and National Council of Educational Research and Training, pp. 99-101

**Programme Officer, Hanoi, Vietnam.

programmes and institutions. A part of his eye-witness account speaks directly to the question:

"WHAT DID WE SEE?

*"Despite being carefully orchestrated for our visits, the children of the kindergarten we spent time and showed every sign of being at home and well-versed in a wide range of individual activities, group work, dance and song. The walls of the kindergarten were often cheerfully decorated, music was always present (even if only a tambourine) and teachers and attendants were in numbers sufficient for a close and easy relationship with the children (in a ratio of approximately 1:10). Children were playing with simple toys of plastic (coloured blocks of different shapes and sizes and Lego-like individual units in many colours for building structures produced nearby at the kindergarten teacher training school) and paper for cutting and folding. Light furniture made from wood to the scale of the child could be moved around the kindergarten space for different activities. The classes were very attractive, the less well-equipped were still very acceptable as pre-school centres."**

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* Alexander's account also includes the following: "...the development of pre-school education -in the form of kindergarten taking in children between 3-6 years old from early morning to late afternoon - is one of China's most well-publicized achievements. The demand for Kindergarten from communities themselves outstrips supply (with present coverage at 25 per cent of the population). "Special attention is given by educationalists to early childhood as the formative period of a child's learning ability (considerably down playing hereditary factors). Their educational goal is for rounded education - intellectual, physical and aesthetic. Yet, if children can be gathered together, given groundings in basic activities of movement, discipline, aesthetic appreciation and general stimulation, the Chinese are convinced it both equalizes opportunity between individuals, as well as being an important platform for acquisition of skills in the primary school age group."

"IF A CHILD LIVES WITH ....."

BEST COPY AVAILABLE

In good part, in very good part indeed, how children will grow up and behave most of the time, if not all, will depend not a little on the emotional and educational experiences the adult world gives them during the early years of their life.

WORKING WITH CHILDREN

If a child lives with criticism,
he learns to condemn.
If a child lives with hostility,
he learns to fight.
If a child lives with fear,
he learns to be apprehensive.
If a child lives with pity,
he learns to feel sorry for himself.
If a child lives with ridicule,
he learns to be shy.
If a child lives with jealousy,
he learns what envy is.

If a child lives with shame,
he learns to feel guilty.
If a child lives with encouragement,
he learns to be confident.
If a child lives with tolerance,
he learns to be patient.
If a child lives with praise,
he learns to be appreciative.
If a child lives with acceptance,
he learns to love.
If a child lives with approval,
he learns to like himself.

If a child lives with recognition,
he learns that it is good to have a goal.
If a child lives with sharing,
he learns about generosity.
If a child lives with honesty and fairness,
he learns what truth and justice are.
If a child lives with security,
he learns to have faith in himself
and those about him.

If a child lives with friendliness,
he learns that the world is a nice place
in which to live.
If you live with serenity,
your child will live with peace of mind.

With what is your child living?

(Written in 1954 by Dorothy Law Nolte for her column "Creative Family Living" in the Torrance [Calif.] Herald).

ANNOTATED LIST OF NOTES COMMENTS... (CHILD, FAMILY, COMMUNITY) NEW SERIES: PRE-SCHOOL EDUCATION 1-39

N.S. No.	Classification No.*	Title
1	1	**Education of Children - 0 to 6 Years - in Developing Countries - A general description** *(Parents' role to ensure balanced emotional and intellectual growth; child in the family; child and his parents; child and society; pre-school activities; role of adults; helping the child grow up; early childhood education)*
2	2	**Child and his Development from Birth to Six Years Old - A resource document** *(The first years of life; the major stages of development; perfecting of previous acquisitions; obstacles on the way; helping the harmonious development of the child; some examples of programmes for young children)*
3	3	**Pre-School Education in Developing Countries - An expert's view.** *(A decisive period; the role of pre-primary education; practical considerations)*
7	4	**Books and Pre-school Learning** *(Books to help adults involved in pre-school learning; do-it-yourself guides; books to help older children involved in bringing up younger siblings; books for future parents at secondary school level; books and/or printed material for the pre-school child; experience of industrialized countries; special considerations in preparing books/*

* As per Index & reading Guide - Notes, Comments...(Child, Family Community) New Series.

materials for pre-school children; books for primary school children; practical implications)

8 5 Some Approaches to Pre-school Education - A resource document
(Extent of current information; examples and pointers: Courtyard Play Centres (Anganwadi); day-care centres to help working mothers (Nigeria); day care of children during agricultural season to relieve mothers for productive work (Senegal), Mobile Creche - Day-care cum pre-school education in urban settings (India); Market Nursery for children of working mothers (Nigeria); Pre-school as base for basic services to children (Trinidad and Tobago); Day care integrated with basic services (North Africa); Integrating day-care and early childhood education (Finland); Pre-school as the initial stage for achieving social/educational objectives (Singapore); compensatory education to help the disadvantaged child (Malaysia); early stimulation in a clinical setting (Uruguay); mothers and neighbours in day-care and pre-school education (Colombia); pre-school education in villages organized by mothers (Sri Lanka); preparing parents for their role in early childhood education (Hungary); non-formal programmes for young children organized by regional and local government (Peru); mobilization of volunteer auxiliaries in pre-school education (Venezuela); involvement of local communities in pre-school education (Italy); community involvement in early childhood education (Australia); mobilizing local resources (Cameroon); a nationwide programme of state-sponsored day-care centres (The Socialist Republic of Viet-Nam); State initiatives in pre-school education (Malaysia); sub-

		regional co-operation in developing programmes for pre-school children (Eastern Africa).
9	6	**How to run a Balwadi - Sample of a do-it-yourself guide book** *(What is a Balwadi; what should the attitude of a Balwadi teacher be; starting a Balwadi; elaboration of activities of a Balwadi; maintenance of records, registers, etc.)*
10	7	**Towards a National Early Childhood Policy - A discussion paper** *(Need for a national early childhood policy; scope of a national early childhood policy; educational aspects of a national early childhood policy).*
13	8	**Training Children to Care for Young Siblings - Exemplar learning materials** *(Development of cognitive competencies and manipulative skills; language and motor development)*
14	9	**University and College Students as Child Development Workers - Experience of M.S. University, Baroda, Gujarat, India** *(Field work; child development worker; constraints; problems and pitfalls)*
21	10	**Toys and Other Learning Materials for Early Childhood - Some suggestions** *(Supervised and unsupervised play; furniture; buildings; items of equipment; the three R's)*
25	11	**The Adaptation of Pre-school Education to the African Environment** *(Pre-school education: For what purpose? Goals and objectives. How? By whom and with what?)*
33	12	**Survival, Protection, Care and Preparation of the Young Child - A discussion paper** *(Some essential pre-requisites of educational policy; why early childhood education?; Expert opinions; trends in the 1980s)*

36	13	Urban Poor and Child Development - A discussion paper *(Urban and rural poor; social and cultural milieu of slums; extra burden of the urban poor child; theoretical and policy implications)*
39	14	Training Programmes for Day-care Workers - A brief introduction to the training model of mobile creches in India *(Need and origin; setting up and evolution; pattern of training; trainer cadre; method/ process of training; training capacity; characteristics of the model)*
54	15	Tentativas de Soluction Relativas al Problema de la Educacion Pre-Escolar No Formal *(Pre-school project in the Dominican Republic: the problem; objectives; strategy; plan of action; research; technology; study programme; distance training; work with parents; education programmes and means of social communication; evaluation; development of elements and contents of curriculum; community participation; intersectoral co-ordination)*
57	16	Community Services Approach to Pre-school Services - Reflections of a group of East African educators *(The problems; existing services for pre-school children in Eastern Africa; priorities and alternatives; general observations and suggestions; setting targets for the future; community, parents and teachers - partners in pre-school education; monitoring and evaluation of pre-school projects)*
59	17	Cognitive Development in African Children - A resource document *(Stages of cognitive development; cultural influences; cognitive development in the African child; factors that facilitate cognitive development; specific examples of*

cognitive development in African children)

60 18 Co-operative Child Care within the Community - An innovative Colombian experiment concerning the pre-school age child
(Co-operative child homes; organizational process; administration and working; activities within the field of education; health and nutrition)

62 19 The Renaissance of Early Childhood Education - The American experience as a basis for comparison with today's conditions in developing countries
(Factors in renaissance of interest; task in hand)

73 20 The Child's First Learning Environment - The family and the home
(The family and the home: Points of departure; the family, the children and the home; conditions for growth)

77 21 The Learning Abilities of the Young Child - Arguments in favour of day-care pre-school education and parent education
(Wasted riches; the vastness of the potential of man; needs of the child from birth to six years; parent education; day-care and pre-school education)

84 22 Seen Through Children's Eyes - A pictorial account of some facets of child development
(A pictorial account of development from birth for parents and teachers)

86 23 Developing Koranic Schools to Meet the Educational Needs of the Young Child
(What is a koranic school? advantages and limitations of Koranic schools; How to improve and develop Koranic schools; some guidelines for starting and conducting Koranic schools)

88 24 Early Childhood Education and Pre-school Intervention - Experiences of early childhood

development and education project of Turkey
(Pre-school education in Turkey; early childhood development and education project in Turkey; First aspect: research and evaluation, Second aspect: conceptualizations and proposals, Third aspect: material development)

91 25 Nutrition Education of Pre-school Age Children - Suggestions to teachers and parents
(Nutrition Education - How can it be achieved? In the long run children must learn to eat well and consume local products; children must learn elementary hygiene rules; evaluating nutrition education; family participation)

94 26 Early Childhood Education Through Home-based Activities
(Why adapt a new approach? A suggested framework for home-based child development activities: Perceptual motor learning, visual discrimination, auditory discrimination, advantages of home-based activities)

95 27 Plan Curricular de la Educacion Pre-Escolar - Dominican Republic
(Continuation of N.S. 54 on pre-school project of Dominican Republic: Contents of pre-school programmes presented in detail in tables)

98 28 Children's Playthings and Play Materials - A resource document for training of personnel serving the young child
(Playthings and play materials: Selected features in the developed world)

99 29 The Changing Face of Early Childhood Care and Education Programmes in Latin America - A review of experiences and aids
(A brief overview; a shifting rationale: From welfare toward development, shifting scope and coverage, toward a combination of custodial

and developmental care, from recuperation toward preventive intervention, from certified professionals or parents to working with many care givers, from more expensive toward lower cost programmes)

101 30 **Hong Kong's Policy on Care and Education of the Young Child - A sample of a newly evolved national policy**
(The structure of pre-primary services; Standards of pre-primary care and education; Financial assistance for pre-primary services; Basic furniture and equipment for kindergartens; Summary of legislation which may be required)

106 31 **Pre-school and Primary Education in China - A brief eye-witness account**
(Pre-school education; Primary schools; Development of services)

107 32 **International Dimensions of Early Childhood Education - A brief survey of current knowledge and some programmes in operation**
(Current knowledge about child development; Some examples of programmes in operation; Conclusions)

109 33 **Training Personnel for Early Childhood Education - An Israeli experience**
(Study programme; Content of lecture series; Workshops; Content of shorter courses; Study visits; Final projects; Participants' findings and conclusions)

111 34 **Primary Care for Pre-school Children through Home Day-care Centres - A Brazilian experience**
(Project execution mechanisms; General method of operation; Cost implications; Conclusions)

122 35 **Early Childhood Programmes in Latin America - A review of experiences and guidelines for action**
(Emerging programmes in early childhood education; Why early childhood education

programmes? Review of the experiences of the 1970s; Some types of successful innovations)

123 36 Day Care Homes in Venezuela: Results of a Comprehensive Evaluation
(The programme: A neighbourhood service; The evaluation: Neighbourhood service scrutinized)

124 37 Common "Street" Games and Child Development - Suggestions for designers of early childhood educational activities
(Common street games: a natural resource; Special relevance: low-income countries; Relevance for "developed" countries; Collecting and grouping of games)

125 38 Pre-school Education and the World's Poorest: An Alternative View
(Is education only an optional concern? Short-term payoffs)

130 39 "Little Mothers Need Help" - A brief account of an Indian experiment in training older siblings for better child-minding
(The education cum recreation (ECR) programme with CHILD-TO-child approach; Guidelines based on experience; Conclusions and points to ponder)

REFERENCES TO NOTES, COMMENTS...
(CHILD, FAMILY, COMMUNITY) NEW SERIES

(1) N.S. 62, The Renaissance of Early Childhood Education, p. 2

(2) N.S. 107, International Dimensions of Early Childhood Education, p. 5

(3) N.S. 115, Health and Nutrition in Early Child Development -David Morley-, pp. 1-2

(4) N.S. 97, Children's Playing Behaviour, pp 4-9

(5) N.S. 98, Children's Playtings and Play Materials, pp 2-3

(6) N.S. 21, Toys and other Learning Materials for Early Childhood, p. 2

(7) N.S. 98, Children's Playthings and Play Materials, p. 3

(8) N.S. 98, Children's Playthings and Play Materials, p. 4

(9) N.S. 98, Children's Playthings and Play Materials, p. 4

(10) N.S. 124, Common "Street" Games and Child Development, p.2

(11) N.S. 124, Common "Street" Games and Child Development, pp 3-5

(12) N.S. 124, Common "Street" Games and Child Development, pp 10-11

(13) N.S. 21, Toys and other Learning Materials for Early Childhood, p. 5

(14) N.S. 31, Audio-Visual Aids for Pre-School and Primary School Children, p. 11

(15) N.S. 33, Survival, Protection, Care and Preparation of the Young Child, pp. 11-14

(16) N.S. 7, Books and Pre-School Learning, pp 2-5

(17) N.S. 31, Audio-Visual Aids for Pre-School and Primary School Children, pp 7-9

(18) N.S. 31, Audio-Visual Aids for Pre-School and Primary School Children, pp 20-21

(19) N.S. 21, Toys and other Learning Materials for Early Childhood, p.2

(20) N.S. 101, Hong Kong's Policy: Care and Education of the Young Child, p 8

(21) N.S. 38, See How They Grow, p. 3

(22) N.S. 38, See How They Grow, p. 4

(23) N.S. 38, See How They Grow, p. 10

(24) N.S. 133, Involving School Children in Community Health - David Morley -, pp 18-20

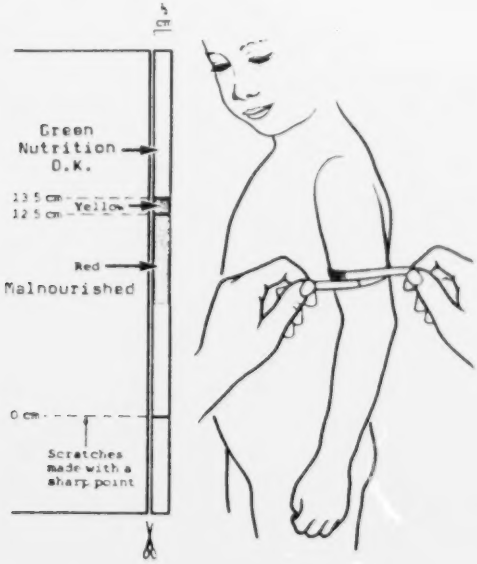
(25) N.S. 50, From a "Teaching" Curriculum to a "Learning" Curriculum, p. 1

(26) N.S. 50, From a "Teaching" Curriculum to a "Learning" Curriculum, p. 3

(27) N.S. 50, From a "Teaching" Curriculum to a "Learning" Curriculum, pp 8-9

W TO MAKE A SHAKIR STRIP

Tape measures are not always available and for many
ople understanding numbers is difficult. Instead people
many countries use a piece of string or a strip of
terial which does not stretch. Old x-ray film is very
od. The figure belows shows how to make it and how to
e it on the child.



king the shakir strip

Most hospitals or clinics have old x-ray films. You
ve to remove the emulsion from the film. To do this soak
e film all night in strong washing soda or diluted bleach.
en all the emulsion is off you will have a clear sheet of
astic. Scratch the plastic with a sharp point in three
aces at 0, 12.5 and 13.5 cm. (fig.2). Use the sharp point
make one single line. Colour both sides of the film and

use a spirit felt pen. The spirit pens smell. The water ones do not last on the film.

Using the strip

First make sure the child is more than one and less than five years old. Let the child's arm hang loosely by its side and place the strip round the middle of the upper arm. Look and see if the scratch comes in the green, yellow or red colours.

If in the green the child is well nourished.

If in the yellow the child is probably malnourished.

If in the red the child is malnourished.

This is an accurate way of finding malnutrition. (It is better than a SINGLE weight for age measurement.) The strip is as good in showing the nutritional state of children as experienced children's doctors.